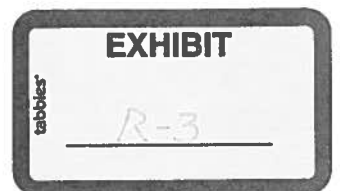


EXHIBIT 3



CITY OF EAGLE EXHIBIT NO. 3

CITY OF EAGLE

Municipally Owned Water System

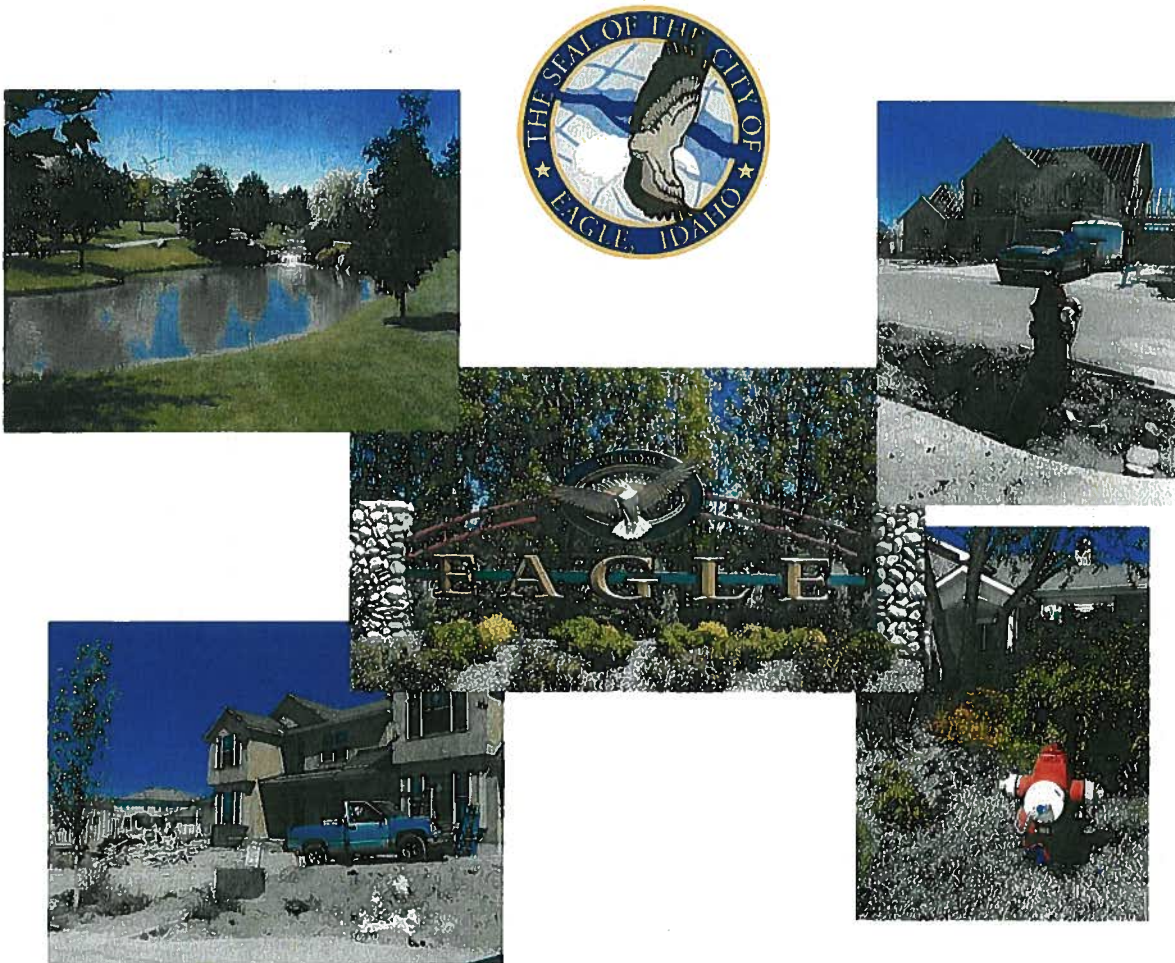
PWS #4010201

AMENDED MASTER PLAN

Revised November 2005

Volume I

Development Plan & Ownership Documents



HOLLADAY ENGINEERING COMPANY

32 N. Main Street P.O. Box 235 Payette, ID 83661

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EG051404



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

ORIGINAL STAMPED APPROVAL COPIES ARE
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COMPANY, 32 N. MAIN STREET, PAYETTE,
IDAHO, 2) EAGLE CITY HALL, 310 EAST
STATE STREET, EAGLE, IDAHO (AFTER
APRIL 2006 EAGLE CITY HALL'S ADDRESS
WILL BE 660 CIVIC LANE, EAGLE, IDAHO),
AND AT 3) IDAHO DEPARTMENT OF ENVIRON-
MENTAL QUALITY, STATE OFFICE, 1410
NORTH HILTON STREET, BOISE, IDAHO.

TSCPE-126/2005

December 30, 2005

The Honorable Nancy Merrill
Mayor of Eagle
City of Eagle City Hall
P.O. Box 1520
Eagle, Idaho 83616

RE: City of Eagle, Master Plan and Budget Study (*Eagle, Ada County*)
Public Water System Master Plan

Dear Mayor Merrill:

The amended master plan and budget study for the above project appear to meet state of Idaho standards, and are approved. The standard conditions on the Department of Environmental Quality (DEQ) review stamp are part of this approval. Supporting reports or documents are considered to be part of the approved documents.

Please call me with any questions at (208) 373-0582, or via e-mail at diane.baconguis@deq.idaho.gov.

Sincerely,

Diane Baconguis, E.I.T.
Idaho Department of Environmental Quality

DB:sjt

Enclosures: One Set of Approved and Stamped Master Plans

C: Charles W. Ariss, P.E., Regional Engineering Manager, DEQ Boise Regional Office
Todd Crutcher, DEQ Boise Regional Office
Mark Clough, P.E., DEQ Technical Services
Larry Waters, E.I.T., DEQ Technical Services
Kenneth R. Rice, P.E., Holladay Engineering Company (*w/ one set approved and stamped master plan*)
Central District Health Department, Ada County Office
Source File 2, City of Eagle, Master Plan and Budget Study, Manager's File
TSCPE Reading File

CITY OF EAGLE

Municipally Owned Water System

PWS #4010201

AMENDED MASTER PLAN

Revised November 2005

Volume I

Development Plan & Ownership Documents



Prepared by:

HOLLADAY ENGINEERING COMPANY

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EG051404

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5	Section 5.0 Component Inventory & Capital Replacement Plan
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7	Section 7.0 Documentation of Water Right and Quality Monitoring
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EXECUTIVE SUMMARY

This report presents the findings and recommendations of a water system planning study for the potable water system owned by the City of Eagle, Idaho. In addition, documentation required by the Idaho Department of Environmental Quality describing the City's financial, technical and managerial capacity to operate and maintain the system is incorporated in this report.

The existing system in the vicinity of the Lexington Hills development complex and adjacent developments consists of one active well, one well that is in off-line reserve status because of physical and chemical water quality problems, and approximately 99,000 feet of water main and lateral lines serving approximately 1,280 Equivalent Residential Customers (ERCs), with a potential of connecting approximately 70 more ERCs within the existing pipe frontage. An intertie with United Water Idaho (UWI) is valved in such a way that water can flow from the UWI distribution system into the City of Eagle distribution system if there is a significant pressure drop in the City system, but does not flow from the City system to the UWI system. This intertie serves currently as the only operating backup for the system. It has been proved effective both by fire flow tests and by operation during a forced repair incident in February and March 2004. However, this intertie alone does not afford full redundancy of service due to its inability to completely fulfill the system's service pressure requirements. Therefore, it is recommended that the City add reserve provisions for supply and storage in order to end sole dependency on this intertie. Additionally, the existing well houses are deficient in ability to deter unauthorized entry and in space to accommodate equipment that may be required at some future time for potential needs for chemical addition. The well house at the active well should be replaced as soon as possible with a more secure structure.

System improvements required to correct the deficiencies of the existing system are replacement of the existing well house at City of Eagle Well No. 1, standby power at Well No. 1, a 1 million gallon storage tank at a site east of the Eagle Sports Park, and connected to the existing distribution system at Greenbrook Street, with a high water elevation equal to the hydraulic-grade-line elevation maintained currently by the pressure of the pump at the active well, and additional active wells, to be drilled at the City's Brookwood well site, and at the Well No. 4 site provided in Water Right No. 63-11413.

A generalized supply, storage and trunk line expansion plan is presented for the Western Expansion Area that has been incorporated into the City's long-range planning by the 2004 Comprehensive Plan. The water expansion plan is presented as a system layout, a development staging plan to supply immediate and future water needs through a phased block approach, a financing plan and an operating



plan. All these elements are general and preliminary and it is expected that specific provisions will be adjusted to accommodate development as it occurs, with the goal of retaining the general pattern of improvements set forth in the plan presented. Approximate total quantities of supply wells, reservoirs and main pipelines needed for the planned system in the Western Expansion Area are:

1. Supply wells (based on 1,000 gpm capacity each): 6
2. 1.5 million gallon reservoirs: 2
3. 20 inch diameter mains: 10,000 l. f.
4. 16 inch diameter mains: 76,000 l. f.
5. 12 inch diameter pump manifold 7,000 l. f.

In addition to these elements, 8 inch diameter or larger interconnected lateral lines would be required as project improvements in every street not served by a (larger) main. The required quantity of laterals is dependent on street layout, and therefore not known at this time.

Probable cost of all the listed system improvements, based on Year 2004 price experience, with pipe amounts discounted for the cost of laterals of equal length, is \$13,400,000. A generalized expansion plan is defined that divides the listed improvements into five development blocks, with the probable cost of water system improvements per block varying from \$1,600,000 to \$5,000,000. The cost of laterals is not included in these amounts. Also appended are general plans for operation and maintenance, construction funding, sampling and monitoring, emergency response, source protection and cross-connection control for the system as a whole.

1

1.0 CONCLUSIONS AND RECOMMENDATIONS

After a review of the present municipal water system, the potential for expansion of service, the requirements for system development in accordance with the amended Comprehensive Plan, the feasibility for incremental system growth driven by development surrounding the City, and the commitment of the City Council to develop a water system as the City of Eagle acts to approve annexation requests, the following conclusions and recommendations have been reached:

1.1 Conclusions

- A. The City of Eagle shall provide for and maintain a water supply and delivery system within its service area to meet the health and safety needs of the City as anticipated by the land uses identified in the amended Comprehensive Plan which included the Western Expansion Area. (*from Water System Mission Statement*)
- B. There are existing well house conditions and scenarios of failure that form system deficiencies in the present delivery system. These are:
 - a. Well house vulnerability due to construction materials
 - b. Absence of standby power on City of Eagle Well No. 1
 - c. Absence of system storage that, under a power outage scenario, yields substandard fire-flow pressure in parts of the delivery system
 - d. Dependence on a single supply well without adequate system storage.
- C. The addition of the Eagle Sports Park Reservoir is vital to meet the minimum fire flow delivery capacity of the existing system at very nearly all points, and will virtually prevent under-pressure at any modeled flow condition.
- D. The expansion of the existing system to adjacent undeveloped tracts will not require change in plan regarding supply sources or storage.
- E. The City shall require multiple wells and storage reservoirs to meet the level of service standard defined for public water systems in the state.
- F. For a municipal enterprise, a long-term condition of dependency for strategic system components and operation is not appropriate.
- G. Anticipated build-out population of the Western Expansion Area, projected at 22,000, will place new demands on the system as follows:
 - a. 2.64 MGD, equivalent to 1,833gpm
 - b. peak day demand, 4.224 MGD, equivalent to 2,933 gpm
 - c. peak hour of peak day, 6.336 MGD, equivalent to 4,400 gpm.
- H. An additional 8.9 cubic feet per second (cfs) will be required to meet the immediate needs property recently annexed (Legacy Development) and for other properties currently under consideration for annexation in Block 1 of the Western Expansion Area.
- I. At build-out the Area will require system storage of 3,000,000 gallons.

- J. A System Improvement Fair Share quotient should be utilized for calculating a standard per-dwelling investment in system improvements and utilized in development agreements in the Western Expansion Area.
- K. Rates for service should be reviewed each year and modified as appropriate to ensure adequate funds and reserve balances.
- L. When appropriate, "latecomer agreements" should be employed to restore equability of the water construction burden over time.
- M. When development of the Western Expansion Area water system reaches significant mass to require full-time system operation, the City should also assume full operation of the existing "Lexington" portion of the system.
- N. An intertie with United Water Idaho, Inc. as a mutual aid availability measure is in the public interest.

1.2 Recommendations

- A. Periodically update portions of the Water System Master Plan as the City develops both within and outside the current planning boundaries.
- B. Pursue correction of deficiencies in the existing system in the sequence presented in the Master Plan. These are
 - a. Reconstruct the City of Eagle Well No. 1 well house (Probable cost: \$50,000)
 - b. Add standby power at the time the well house is reconstructed (Probable cost: \$30,000)
 - c. Construct the Eagle Sports Park Reservoir (Probable cost: \$1,320,000)
 - d. Construct Brookwood Well (Probable cost: \$300,000, to be paid partially by developer), and subsequently construct Well No. 4, contingent on performance of Brookwood Well.
- C. Pursue the process of judicial confirmation to construct the Eagle Sports Park Reservoir as soon as legal steps can be taken.
- D. Carry out plans to serve properties adjacent to the existing system.
- E. Pursue the acquisition of water rights, the trunk line loop, and the development of the Western Area Reservoir.
- F. Develop an in-house operating plan and staff that can be expanded along with system growth.
- G. Develop sufficient water supply to meet the demands of municipal growth.
- H. Pursue existing appropriation permits with IDWR to meet demands of immediate development applications.
- I. Pursue existing BLM site for location of the two 1,500,000 Western Area storage reservoirs.
- J. Adopt an equitable System Improvement Fair Share cost of \$1,500 per residential customer for the allocation of system-wide costs such as the major trunk line loop and the Western Area Reservoir(s).

- K. Adjust rates as necessary after a review of cost and services to maintain adequate reserve balances to meet capital and replacement requirements.
- L. Employ "latecomer's agreements" to assist in equitable cost distribution.
- M. Assimilate the operation of the existing "Lexington" system when appropriate.
- N. Retain a mutual-aid intertie with United water Idaho if mutually agreeable.

2

2.0 INTRODUCTION

2.1 General

The City of Eagle received ownership of the potable water system for Lexington Hills Subdivision from the developer in 1992¹. The system at that time included Well No. 1 and No. 2, and distribution lines serving early phases of the Lexington Hills development complex, amounting to approximately 200 home sites. The regular use of Well No. 2 was discontinued due to water quality problems early in the history of the system. The system as planned was intended to include a total of four wells, as set forth in Water Permit No. 63-11413. The original distribution system was expanded as adjacent tracts of land were developed and connected to it for water service. Starting in about 1999, it became evident that Well No. 1, the single well that provides most of the service to the system, would need augmentation. As the discussion of the system's needs developed, it was concluded that a Water Master Plan was needed to guide further system development. A plan was written and was presented to the City Council in 2002. In 2004, development activity in an area adjacent to and lying west of the then-effective impact area of the City of Eagle prompted a Comprehensive Plan revision which culminated in preparation of the 2004 Comprehensive Plan. This new comprehensive plan envisions annexing lands lying between Linder Road and State Highway 16 that lie to the west of the western boundary of the planning area of the former 2000 Comprehensive Plan. This Amended Water System Master Plan revises the previous master plan to reflect providing water service to the Western Expansion Area between Linder Road and State Highway 16 (See, *Water System Development Plan Map*, following page), and incorporates sections required by the Idaho Department of Environmental Quality (DEQ) as listed in their guidance document How to Demonstrate Financial, Technical, and Managerial Capacity in New Public Water Systems.

2.2 Scope of Plan

This plan presents the findings and Capital Improvement Plan recommendations of a study performed to evaluate current conditions and future needs of the City of Eagle's municipally-owned potable water system. This system at present serves a contiguous group of residential developments situated in Sections 3 and 4 of Township 4 North, Range 1 East of the Boise Meridian. Expansion of municipal water service to the Western Expansion Area identified in the City's 2004

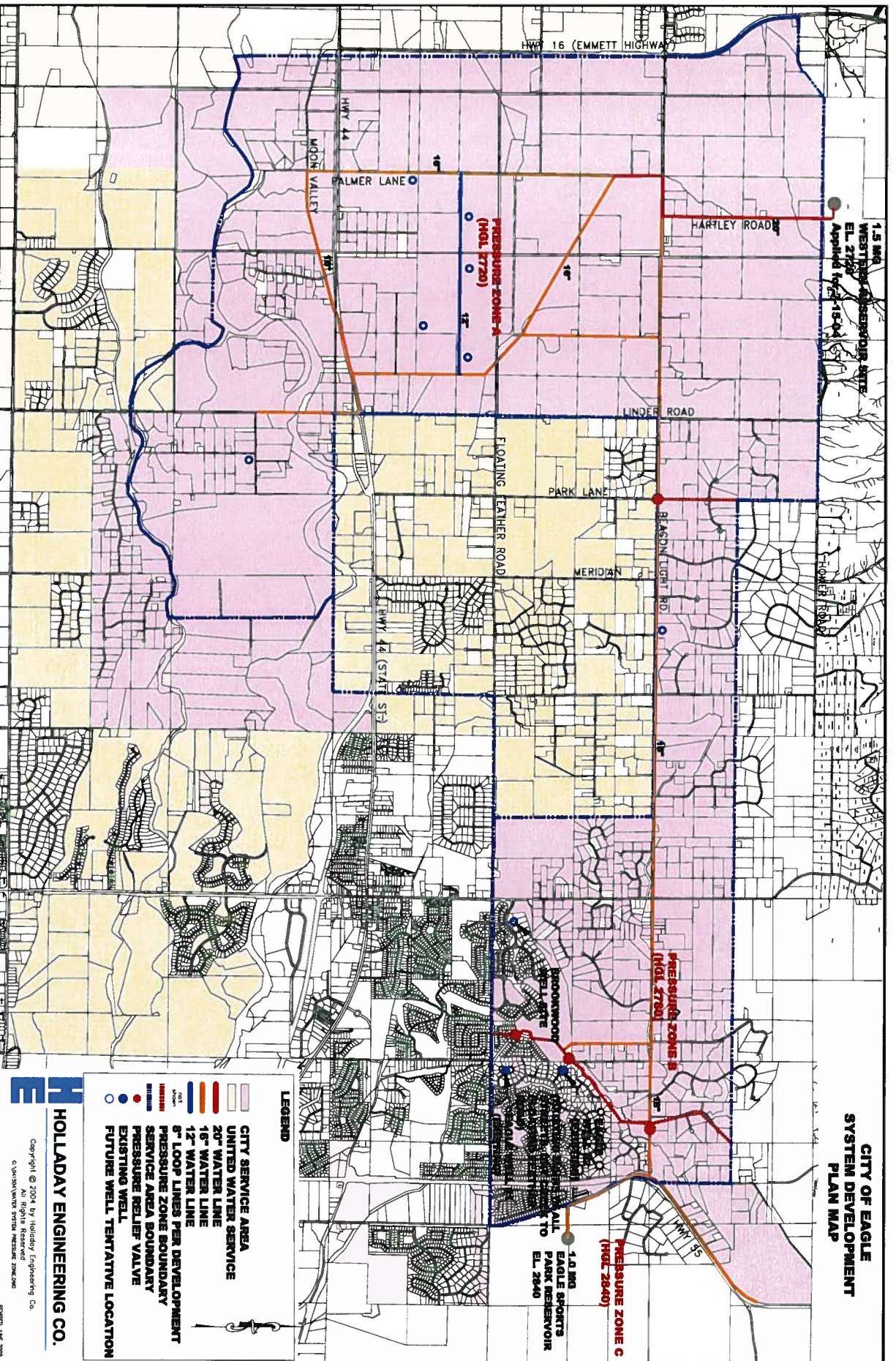
¹ Ownership documents, Appendix A, include Agreement for Transfer and Operation of Domestic Water System, May 20, 1992; First Amendment to the Agreement for Transfer and Operation of Domestic Water System between Lexington Hills, Inc., Treasure Valley Village, and the City of Eagle dated May 20, 1992, September 1, 1992; Cooperative Agreement, October 14, 1997; Assignment of Water Permit No. 63-11413; and Warranty Deed for Well Lot, September 1, 1992.

Comprehensive Plan is a policy adopted by the City as part of the 2004 Comprehensive Plan. This Amended Master Plan incorporates the overall supply, storage and trunk lines plan layout and the Capital Improvements Plan which defines the general procedure for staged construction to obtain or build the improvements implicit in the water service policy established through the Comprehensive Plan update of 2004.

In addition, the master plan includes sections on related topics necessary to inform the City and public in their decision process.

1. Budget for operation, maintenance and improvements to source components for the existing system in Sections 3 and 4 of T4N, R1E
2. Generalized schedule requirements for maintenance and repair/replacement
3. Source protection plan basic provisions
4. Monitoring and compliance plans
5. Cross-connection control plan basic elements
6. Emergency response plan

CITY OF EAGLE SYSTEM DEVELOPMENT PLAN MAP



LEGEND

- CITY SERVICE AREA
- UNITED WATER SERVICE
- 20" WATER LINE
- 16" WATER LINE
- 12" WATER LINE
- 8" LOOP LINES PER DEVELOPMENT
- PRESSURE ZONE BOUNDARY
- SERVICE AREA BOUNDARY
- PRESSURE RELIEF VALVE
- EXISTING WELL
- FUTURE WELL TENTATIVE LOCATION

HOLLADAY ENGINEERING CO.

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C:\WORK\PROJECTS\SYSTEM IMPROVEMENT\FIGURE.DWG

REVISED: JAN 2005

3

3.0 SYSTEM OWNERSHIP AND MANAGEMENT

3.1 Ownership

The original segment of the City of Eagle's water system was constructed as the community water system of Lexington Hills Subdivision, owned by the developers and operated by a contract operator. The developers constructed and equipped the two existing wells, referred to in some documents as "Lexington Hills Well Number 1" and "Lexington Hills Well Number 2", and the distribution system for the early phases of the Lexington Hills development (a 12-phase development). In 1992 the developers, Lexington Hills, Inc., and Treasure Valley Village, Inc., transferred ownership of the system, including all appurtenances then existing, to the City of Eagle, including points of diversion for Well No's. 3 and 4, named in the transferred Water Permit No. 63-11413 (see Appendix A for copies of transfer contract and bills of sale). Since that time, the distribution system has expanded through developer extensions granted to the City under the terms of development agreements. The existing wells previously mentioned are now designated "City of Eagle Well Number 1" and "City of Eagle Well Number 2", respectively. Because the wells are located in the Lexington Hills development area, this water system is frequently referred to for convenience herein as the "Lexington" system.

Owner contact information:

Owner: City of Eagle, Idaho
Contact: Michael C. McCurry, Facilities Manager
Mailing Address:
P.O. Box 1520
Eagle, ID 83616
Telephone: (208) 939-6813
Fax: (208) 939-6827

3.2 Management

Upon receipt of ownership of the system from the developers, the City of Eagle contracted with an operating company named Engineering, Management and Maintenance, Inc., to operate and maintain the system and perform billing services. This company was frequently referred to as "EM2". The EM2 company was subsequently acquired by United Water Idaho, which thus became the contract operator of the system. The operating contract was renegotiated in 1997, and subsequently renegotiated again in 2004. At present, United Water Operations Idaho, Inc. (UWO), (a division of United Water Idaho, Inc.) is the contract operator of the existing system under the terms of the WATER SERVICE CONTRACT – 2004, a copy of which is included in Appendix B. The contract operator under the terms of this contract performs ordinary operation, maintenance, testing and billing

and gives written operation reports to the City at intervals of one month, along with quarterly and annual summary reports. The contract requires the operator to employ qualified and duly licensed personnel, and to perform regulatory reporting as required by agencies having pertinent jurisdiction.

Additional contracts between United Water Idaho and the City of Eagle, generally referred to as the Fire Flow Agreement and the Supplemental Water Agreement, provide for backup of Eagle's supply in emergency conditions.

Operator Contact Information:

Operator: United Water Operations

Contact: Bob Lawrence

Mailing Address:

8248 W. Victory Road

Boise, ID 83709

Telephone: (208) 362-7370

FAX: (208) 362-7069

3.3 Organization:

3.3.1 Assigned Duties:

3.3.1.1 Direct Chain of Command:

1. City Council: sets rates and budget; authorizes any operating contract changes; authorizes staff positions and hiring; sets City and system policies.
2. Mayor: is chief administrative and executive officer of City. Acts as general supervisor of all employees of City, including Facilities Manager.
3. Facilities Manager: acts as City's oversight and liaison contact with Operation Contractor; acts as administrator of City's construction and facilities services contracts, including those for capital improvements to water system; acts as reviewer of requests for payment by contractors; represents City in addressing consumer complaints if not resolved by Operation Contractor; presents water system budget recommendation to Council; first responder for City in event of emergency.
4. Operation Contractor: operate system in accordance with applicable laws, rules and standards; read meters, perform billing and collection, disburse proceeds to City Clerk-Treasurer; perform ordinary maintenance and minor repairs routinely; advise City of needs for capital improvements to currently existing facilities (such as protective covers and shields on existing equipment, required additions to safety equipment of all sorts, improvements to access ways for maintenance

equipment, and the like) and non-routine repairs (as more particularly defined in the Operating Contract); general customer service duties and initial response to customer complaints; review of engineering plans for developer extensions of distribution system; general oversight and quality assurance activities during construction of developer extensions of distribution system; cross-connection control program; water quality testing and reporting.

3.3.1.2 Oversight, Advisory and Support Duties of Other City Staff

1. Clerk-Treasurer: receives water bill collections proceeds from Operations Contractor; maintains water system accounts in City Treasury; makes operating fee payments to Operating Contractor in accordance with provisions of Operation Contract; maintains ledgers of receipts and payments; makes other payments (example: payments to contractors for special Capital Improvements contract work, and the like) as authorized by City Council, prepares annual City budget recommendation for Council review and action.
2. City Engineer: when so authorized by Council, prepares or reviews designs and plans for distribution system extensions and facility additions (i. e., wells, reservoirs, booster pumps and the like); assists Facilities Manager in administration and quality assurance during construction as authorized by Council; prepares Master Water Plan and updates to it, including recommendations for additions of facilities (such as new wells, new reservoirs, and the like).

Employee policies and procedures documents maintained by City Clerk-Treasurer:

1. Personnel Policy, including the following topics among others:
 - a. Performance and behavior.
 - b. Compensation and benefits,
 - c. Withholding and hours'
 - d. Time sheets and payroll reports,
 - e. Withholding and hours,
 - f. Evaluation and discipline,
 - g. Harassment policy
2. Drug-free Workplace Policy

Legal services: provided by attorney appointed and confirmed annually by Council. Current incumbent is :

Susan Buxton
Moore, Smith, Buxton and Turcke, Chtd.

225 north 9th St. Suite 420
Boise, ID 83702
Telephone: (208) 331-1804
FAX : (208) 331-1202

Engineering services: provided by consultant appointed and confirmed by Council annually. Current incumbent:

Holladay Engineering Company
Attention: Vern Brewer, Project Manager
P. O. Box 235
Payette, ID 83660

Telephone: (208) 642-3304
FAX: (208) 642-2159

Fiscal controls: financial records of water system income, City disbursements for water system, and balances of water system fund accounts are audited annually as a part of the regular general financial audit conducted for the City.

Liability protection: operating contract with UWO stipulates minimum liability insurance coverages to be maintained by UWO. City also has its own liability coverage through ICRMP.

4

4.0 SERVICE AREA, EXISTING FACILITIES AND SYSTEM WATER USAGE

4.1.1 Current Service Area

The system currently serves the Lexington Hills, Echo Creek, Crown Point, Eagle Crest and Brookwood developments comprising at present all the area bounded by Floating Feather Road on the south, Old Horseshoe Bend Road on the east, Eagle Road on the west and Dry creek on the north, with the exception of some lots of Bogus Ridge Subdivision and possibly a few older houses elsewhere in the general area, served by individual wells. The April 2005, monthly report showed a services count of 1,280. This is very close to the expected "build-out" condition for these developments (approximately 1,350 Equivalent Residential Customers (ERCs)). The majority of these services are single-family domestic, but the area includes an elementary school and seasonal amenity service connections for the Lexington Hills development complex (which has water amenities intertwined with those of the Echo Creek development) and the Crown Point development complex. A map of the current service area² adopted by the City is included in Appendix B, as an exhibit in the WATER SERVICE CONTRACT -- 2004.

4.1.2 Anticipated and Potential Service Expansion Area

Other areas of the City of Eagle are currently served by Eagle Water Company, a regulated investor-owned public utility and by United Water Idaho, a regulated investor-owned public utility. Each serves within the area certificated to it by the Idaho Public Utilities Commission. Anticipated minor expansions of the City system's service area may include currently uncertificated and undeveloped areas adjacent to the present service area and lying north of Floating Feather Road and south of Beacon Light Road within the currently defined impact area of the City. The principal areas affected are a 72-acre tract and a 115-acre tract. It is probably conservative to project that the density of development of these tracts will be at a density of 1 house per acre or less, whereby they represent a potential for about 167 more services, bringing the potential total to about 1,517. These anticipated expansions, if they come to be served by the existing ("Lexington") system, as augmented by the specific facility additions recommended herein, will not increase loadings to a degree requiring any change of plan regarding supply sources or storage.

In addition to these adjacent tracts, there is a large expansion area, comprising the City's requested impact area expansion, which the City of Eagle also intends to include in its municipal water service area. This addition to the water service area includes those parts of Eagle's impact area, as adopted in Eagle Ordinance 475 of

² Defined per Idaho Code 42-202B(9)

July 8, 2004, lying north of Beacon Light Road or west of Linder Road or both. At current zoning density, the area north of Beacon Light Road and east of Linder Road, containing approximately 3,000 acres, will probably continue for some time to be served primarily by individual wells, but it is expected that this area will gradually exert a demand for centralized water service as time passes. The area west of Linder Road, containing approximately 7,000 acres, referred to hereafter in this text as the Western Expansion Area, is expected to develop such that about two-thirds of the total, or some 4,700 acres, will be in an urban-like pattern that will require a centralized water utility in the near future³. This area was included in the Comprehensive Plan Revision adopted in February, 2004. Since the adoption of the Plan which included a designated water service area component and map, annexation actions for approximately 1,000 acres have been initiated by property owners and Applications for Permits have been filed with the Department of Water Resources (DWR). The probable buildout population for the Western Expansion Area is 22,000. The probable ultimate number of added services in this area is about 7,700. A map showing this potential expansion area along with the current ("Lexington") system area and the general plan for expansion trunk lines, well locations and reservoir sites, is included in Appendix C and discussed in greater detail in Chapter 6.

4.1.3 Required Level of Service

The level-of-service standard for public drinking water systems in Idaho is set by the Administrative Rules of the Idaho Department of Environmental Quality ("Rules"), as a minimum. The applicable parts of these Rules set minimum standards for water quality, for quantity of water available to each customer at any time, and for the functional reliability of the water system. As is evinced by the Water Quality Report reproduced in Appendix H, existing Well No. 1 produces water of conforming quality, and no well will be placed on line in the system until it has been proven to produce water of conforming quality.

The quantity requirement of the Rules comprises several specific provisions, but can be summarized as a requirement that the system be capable of supplying all probable demands, including any demand for large flows to fight fire, at any time, even if some of the system's equipment is not functioning, without experiencing line pressures lower than 25 psi at any point.

³ Defined per Idaho Code 42-202B(8). "Reasonably anticipated future needs" refers to future uses of water by a municipal provider for municipal purposes within a service area which, on the basis of population and other planning data, are reasonably expected to be required within the planning horizon of each municipality within the service area not inconsistent with comprehensive land use plans approved by each municipality.

The reliability requirement is the logical corollary of the "at any time" element of the quantity requirement. Since "capacity to deliver" is the test of the level of service, the quantity standard can be met either by having adequate well production capacity to meet any demand (including fire demand) even if the most productive well is out of service, or by a combination of wells and storage facilities that can be shown to be adequate for the worst-case situation as defined by good practice in water supply engineering. In general, a public water supply needs at least two functioning wells (or, in more generality, sources). Fire demands are more efficiently met by providing water storage than by providing added wells that are not regularly used, in most situations. Hence, it is concluded that this system's required level of service generates a need for multiple wells and for storage reservoirs, as defined by the standards of practice referenced by the Rules.

4.2 Existing Facilities

The system's existing facilities generally comprise the water distribution pipe network in the Lexington Hills, Echo Creek, Eagle Crest, Crown Point and Brookwood developments, City of Eagle Wells Number 1 and Number 2, and a 12 inch water main that runs from United Water's Floating Feather Well along Floating Feather Road to the entrance to Lexington Hills Subdivision Number 1. The 12 inch main has been operated as a part of the United Water pipe network since it was constructed in 1997, and has been connected to the remainder of the City's system by two pressure reducing valves. There is also another check-valved intertie point between the two systems, located somewhat west of the intersection of Floating Feather Road and Idaho Highway 55. The interties function as an emergency backup provision in the event of fire demand or pump outage. Until late fall of 2004, the Brookwood subdivisions have been served directly from the 12-inch main, and their actual principal water source was United Water Idaho's Floating Feather Well. This situation was an interim stage in system development and has now been modified so that the Brookwood subdivisions are served from the City's supply. Normally, the entire system is supplied from City of Eagle Well Number 1, and operates at a higher pressure than the United Water Idaho system, so that the systems remain hydraulically separate in normal operation. At the time of this writing, United Water Idaho is in the process of installing a 16-inch main on Floating Feather Road that will become their transmission line in lieu of the City's 12-inch main. When the 16-inch main is installed, the City's 12-inch main will be re-connected such that it will be an integral part of the City's distribution system. Intertie connections (pressure reducing or check valves, according to particular situations) now joining the 12-inch main conditionally to the City's distribution system have been replaced by functionally-similar intertie connections to the 16-inch line, so that the City's system continues to have emergency backup performance at least equal to its present condition. The contractual arrangement with United Water Idaho that provides for this system intertie comprises two

documents, generally referred to as the "To and Through Agreement" and the "Fire Flow Agreement", which are also included in Appendix B.

Wells

City of Eagle Well Number 1 is the only well that the system is currently being regularly served from. Eagle City Well Number 2 has hydrogen sulfide, excessive iron content and severe sanding problems and is being held in off-line reserve. The hydrogen sulfide and iron problems are chemically correctible at moderate cost, but the City has been advised by Holladay Engineering Company that the probable cost of a reliable and long-term solution to the sanding problem is so high that the option of constructing another well elsewhere is more financially attractive. The remedies that could meet the "reliable and long-term" criterion reduce in general to reconstruction or installation of a pre-packed screen. Reconstruction would be essentially as costly, if not more so, as original well construction⁴. Pre-packed screen installation would reduce the production of the well greatly, and cost about half the cost of original construction. The production gained per dollar spent would be about the same as from a new well in either case, and the water from the aquifer at this location would still be water that would require two kinds of chemical treatment (for sulfide neutralization and for iron sequestration) to be acceptable for use.

City of Eagle Well Number 1 is equipped with a regular service pump of about 250 gpm capacity, operated through a variable frequency drive, and a lag service pump of about 600 gpm capacity, also equipped with a variable frequency drive. Variable frequency operation is used to maintain pressure at the set-point at the wellhead. The pumps and controls at Well 1 are tied into the United Water Idaho SCADA system by a radio receiving and transmitting unit (RTU).

4.2.1 Distribution System

The distribution system contains about 99,000 feet of mains and laterals (see Section 5.1 for item inventory), plus conventionally located line valves, fire hydrants, blow-off valves, and service meters. In addition to these standard items, there are the check and pressure reducing valves that control the intertie with United Water Idaho and two pressure reducing valves that divide the system into two pressure zones. The higher pressure zone contains Wells 1 and 2 and includes the Lexington Hills, Echo Creek, and Eagle Crest areas and a part of the Crown Point area. The lower pressure zone includes the remainder of the Crown Point area and the Brookwood area.

⁴ Well logs for City of Eagle Well No. 1 and 2 are included in Appendix G.

Ordinary line pressures in both zones vary from about 60 psi to about 90 psi, depending on the elevation of the specific site. The ground surface elevation difference between the lowest point in the system and the highest point in the system is approximately (from USGS maps) 134 feet. The system is divided such that the elevation difference range within each zone is about 70 feet, which corresponds to a line pressure difference range of about 30 psi. Pressures in the upper zone are controlled by the operating setpoint of the variable-frequency-drive control system. Pressures in the lower zone are controlled by the settings of the pressure pilots of the interzone pressure reducing valves. At points remote from these control locations, there will be minor pressure fluctuation reflecting differences in head losses caused by fluctuation in system water demand. These are generally more pronounced the further the location lies from the well or the pressure reducing valve. Calculations and also "records of pressure fluctuation" from pressure recorders placed at various locations for periods of typically a few days by the Operating Contractor indicate that during normal service, even at the peak hour of the peak day, this fluctuation is generally not more than 1 psi in magnitude.

4.2.1.1 Flow Network Modeling Findings

The existing part of the distribution system has been hydraulically modeled by UWO, using software by Haestad Methods, Inc. Results show that adequacy of the system to deliver fire flows vary with locality and with the status of both the pump in Well No. 1 and United Water Idaho's Floating Feather Booster Pump.

Minimum fire protection capacity is taken as the ability to deliver 1,000 gpm to any hydrant, together with the ability to deliver 1,500 gpm at Sevenoaks Elementary School. The current system meets both of these criteria if both the (City's) well pump and (United Water's) booster pump are functioning. It fails to meet the 1,000 gpm criterion at some high points if both pumps are not working (this would be the condition where pressure is maintained only by United Water's Hidden Hollow Reservoir). Additionally, it fails to produce 1,500 gpm at Sevenoaks School if the Floating Feather Booster Pump is not running.

Flow modeling has also been performed to predict system performance after addition of an Eagle Sports Park Reservoir connecting to the system at Greenbrook Street, after addition of a well at the Brookwood site, and with both additions. The available fire flow condition will be somewhat modified by adding the well at the Brookwood site, in that the "all pumps off" condition will become vanishingly improbable. Hence, the Brookwood well cures all minimum-fire-flow deficits except at Sevenoaks School (under the condition of Well No. 1 and Floating Feather Booster both not operating). The fire flow at Sevenoaks would be between 1,400 and 1,500 gpm in this scenario, so the deficit from minimum would be slight.

Reports and maps produced by the hydraulic modeling program are included in Appendix D.

Addition of the reservoir at Greenbrook Street would dramatically improve the fire flows available at all locations in the system, even with no pumps effective. Available fire flow at Sevenoaks School would become about 3,000 gpm, and a majority of hydrants show at least 2,000 gpm available, in the critical all-pumps-off mode. Those nodes indicating less than 2,000 gpm fire flow on the Haestad Methods solution plot are typically short dead end lines without hydrants. Generalizing, addition of the Eagle Sports Park Reservoir would approximately double the minimum fire flow delivery capacity of the system at very nearly all points, and virtually prevent under-pressure at any modeled flow condition. This dramatic prospective improvement in performance strongly supports the conclusion that the reservoir is a more critical need of the system than the added well, and should have priority over it in funding and in construction scheduling.

4.2.2 Reserve Provisions

The currently active intertie with the United Water Idaho distribution system consists of two connection lines with check valves that allow flow only from UWI to Eagle City, and rate/total meters to record any flows from UWI. Since the City's system is operated at a higher pressure set-point than the UWI system, there is no flow from UWI to the City system except during pump outages and high-demand emergencies. (Year 2004 quantity data shows significant importation of water from UWI. This occurred because the distribution system serving the Brookwood development area was initially not connected directly to the distribution system serving the Lexington Hills, Trail Creek, Feather Nest and Eagle Crest development areas. While this was the condition, the Brookwood area received water from the intertie. Connections between the Brookwood and "Lexington" systems were completed in late 2004.) The intertie currently serves as the City system's reserve, both for mechanical or power failure and for fire demands. It satisfies the criterion that service must continue even if the most productive well (or other principal source, in general) is not functioning. During normal operation, the system does not currently import water from UWI. Two additional potential points of connection are currently occupied by closed gate valves.

The existence of the intertie with United Water has a history. When the system served only residential customers, the condition of having two wells was relied on as the needed emergency reserve. It was believed that some capacity for fire fighting existed, and probably enough to manage a typical house fire, even if only one well were available. Then it was decided that Well No. 2 was not usable for supply due to its quality problems, and it was valved off from the system. Then an elementary school was built within the service area, and the City was informed of its

responsibility to provide water for fire protection for it. The intertie installation was negotiated with United Water and built in 1997, as representing the only immediately affordable approach that could meet the expanded fire flow needs, as well as the only approach that could possibly be completed in time to match the schedule for school opening. Thus, it is to a degree a surviving crisis response. As such, it warrants examining to determine whether its continued use – and reliance on it – is optimal for both United Water Idaho and the City of Eagle.

Existence of the intertie represents a commitment of capacity on the part of UWI that is not connected to ordinary demand for water. UWI is compensated financially by a periodic fire connection charge paid by the City as if this were the fire line for a building. Even so, the hidden infrastructure burden to UWI of being subject to the sudden spike of demand this intertie can exert is probably considerable, although there seems to be no clear way to compute what it would be. Overall, it seems that it would be more equitable to UWI for the City's system to provide its own fire and emergency reserve infrastructure, rather than totally rely on an improvised "patch" measure for an indefinite time.

From the City's standpoint, the existence of this intertie has allowed avoiding some significant infrastructure investments (at the minimum, the costs of another on-line well and a storage reservoir, or at the very least, standby power for the existing well, with controls of the two pumps modified as needed to let each pump be capable of functioning alone as the source of supply, and a storage reservoir) by relying on the intertie. And the City's system has operated on the intertie, successfully, for about a month in 2004, when both pumps in Well No. 1 were removed for repair at the same time. It has been shown to be a functionally adequate reserve system from the City system's viewpoint, both by this experience and by fire flow testing. But reliance on it imposes a state of dependency that is not appropriate as a long-term condition of a municipal enterprise, and subjects the users to the risks of the UWI system in addition to the risks of the City's system. This compounding of risk constitutes a deficiency in terms of the required level of service. From the viewpoint of the users, then, it would be more supportive of their right to good definition of overall system reliability for the City's system to own its own reserve infrastructure. Hence, this Master Plan includes a new 1,000,000-gallon Eagle Sports Park Reservoir at a site east of the Eagle Sports Park, an additional well at the Brookwood site that has been set aside near the intersection of Eagle Road and Floating Feather Road, and standby power at City of Eagle Well No. 1 as system improvements required to correct existing deficiencies in the capital improvements plan.

It would be prudent, however, to also retain the intertie as a mutual aid availability measure, if UWI agrees to continuance. The added measure of system reliability that the intertie would continue to afford even after completion of the reservoir, standby and additional well is well worth preserving. Generalizing, the practice of

mutual aid between service utilities is typically very much in the public interest, especially with respect to ameliorating emergency situations – or, often, preventing local breakdowns from escalating into emergencies. As a mutual aid measure, a policy of maintaining emergency-assistance interties with adjacent water utilities is worthy of continuation.

There are some issues related to service pressure when operating on the intertie and minor pressure fluctuations during the normal daily service cycle at the points in the system most distant from Well No. 1. These are not of such a degree as to potentially interrupt service nor to potentially impede fire suppression. When the recommended on-line reservoir is completed and standby power is installed at Well No. 1, these potential pressure variations will be eliminated. These recommendations are further discussed in Section 4.3, System Water Usage and in Section 6, CAPITAL IMPROVEMENT AND EXPANSION PLAN.

4.3 System Water Usage

Existing City system water production and use records (Appendix D) from October, 2003 through September, 2004 indicate a total water production from Well No. 1 of 99,568,000 gallons and total import of water from United Water Idaho of 24,178,000 gallons, totaling 123,746,000 gallons supplied. Total usage recorded during the period, derived from meter readings taken at a customary time other than month-end, was 116,809,000 gallons, of which the Lexington Hills Homeowners' Association's amenity ponds received a metered total of 15,559,000 gallons. These figures appear to indicate 5.6% of production unaccounted for, but the 12-month rolling average indicates, on average, about 2.5% unaccounted for. Apparently, the fiscal-year period coincides with an enhanced difference in use during the few days of mismatch (late September) between the production record period and the use record period, possibly representing differences in amenity water demand from one year to the next. These data indicate relatively good recording of water use by the customer meters. The oldest meters in the system are 13 years old, and are probably somewhat worn, but apparently they are still usable and can probably be left in place until their normal twenty-year use period is done.

WATER USE TABLE

CONDITION	MEAN	PEAK DAY	PEAK HOUR
Current (1,248 ERC):			
Household, gal/ERC-day	281	714	1,070
System, gal/day	350,000	890,600	1,335,900
System, gal/min	243	619	928
Build-out (1,350 ERC):			
Household, gal/user-day	278	697	1,045
System, gal/day	375,000	941,000	1,411,000
System, gal/min	260	653	980
Household, gal/day/capita	86*		

NOTE: *Excludes surface water irrigation use

Averaged over a year's time, with the mean number of users being 1,206.33, total measured use based on production comes to 281 gallons per day per user (gpud). On the same basis, measured amenity use at the Lexington Hills Homeowners' Association meter amounts to 35 gpud, leaving an apparent household average use of 246 gpud. Based on the Year 2000 U. S. Census finding of 2.87 persons per household in Eagle, this is approximately 86 gallons per day per capita on an annual basis, which is very similar to normal use nationwide.

Average use calculated month-by-month from records of user meter reading aggregates shows a range from about 222 gpud in December, 2003 to 434 gpud in April, 2004 (see Appendix D). The variation is caused mostly by the amenity use, which is greatest, typically, in April and in October or November. The amenity ponds are used as reservoirs for the development's pressure irrigation system, and are supplied from the potable water system only in those times of year when surface water supplied by the canal company is not available (typically before mid-April and after mid-October). Significant irrigation demand is usually limited to the one-month periods immediately before and after the canal operation season: mid-March to mid-April in the spring and mid-October to mid-November in the fall.

The probable demand profile of this system is somewhat different than usual residential-area potable systems because of the superposition of the very seasonal amenity use on an otherwise typical domestic use pattern⁵. Average household use without the addition of amenity use is 246 gpud; with amenity use added, average household use is 281 gpud. At expected build-out about 102 user-equivalents would be added, which would add 25,000 gpd to the average use, 50,000 gpd to the peak day and 75,000 gpd to the peak-hour use, giving anticipated build-out condition totals of 375,000 gpd (260 gpm, equivalent to 278 gpud) average, 941,000 gpd peak day (653 gpm, equivalent to 697 gpud) and 1,411,000 gpd peak-hour (980 gpm, equivalent to 1,045 gpud).

⁵ The approximate highest-month amenity use, based on the observed meter readings in Fiscal 2003/4, is about 138,300 gallons per day (gpd)(November, 2003). With a probable peaking factor of 2.0, the peak day amenity use is probably 276,600 gpd, and the peak-hour is probably 1.5 times the peak day, or 414,900 gpd. The apparent average household use is 246 gpud. With probable peaking factors of 2.0 and 1.5, the probable peak-day household use is 492 gpud and the probable peak-hour household use is 738 gpud. With 1,248 users at last report, these values imply system household-use values of 307,000 gpd average, 614,000 gpd peak-day and 921,000 gpd peak-hour. Superposing the amenity-use values gives a system annual average of 307,000 + 43,000 for 350,000 gpd (243 gpm, equivalent to 281 gpud), a peak-day of 614,000 + 276,600 for 890,600 gpd (619 gpm, equivalent to 714 gpud) and a peak-hour of 921,000 + 414,900 or 1,335,900 gpd (928 gpm, equivalent to 1,070 gpud).

5

5.0 COMPONENT INVENTORY AND CAPITAL REPLACEMENT PLAN

5.1 Component Inventory

The existing system has the two wells previously mentioned. Appurtenances to these wells are listed in well appurtenance inventory lists in Appendix B. Generalizing, Well No. 1 is equipped with two pumps in a dedicated lead-lag control configuration, controlled through variable-frequency drives, and integrated for control into the United Water Idaho SCADA system. There is also a chlorine injection system, and a phosphate injection system for corrosion control. The lead pump has a maximum capacity at the system service pressure of about 250 gpm, and the lag pump has a similarly qualified capacity of 600 gpm.

Well No. 2 has a single pump, of about 600 gpm capacity, wired across-the-line and without remote control. Well No.2 has a Cla-Val Pump Control Valve with an air-gapped drain shunt line that discharges to the Lexington Hills Subdivision amenity pond complex, whereas Well No. 1 does not have a pump control valve of this type on either pump. The function of a Cla-Val Pump Control Valve is to divert the initial rush of water to waste when a pump is first turned on. Apparently, this was provided at Well No.2 in an attempt to divert the sand that is produced from the well, but was not provided at Well No. 1 because it does not have a sanding problem. The pump control valve has not proved out in practice to be an adequate remedy for the sanding problem, but its presence and the existence of the shunt line presents the opportunity to dedicate this well to shoulder season amenity service if the City should find that would serve its best interest (currently, the City has not made such a finding). As has been previously mentioned, Well No. 2 also has hydrogen sulfide and excessive iron.

The distribution system includes a total of 99,313 feet of main and lateral pipes. All pipes serving fire hydrants are 6 inch diameter or larger. Four major loops of 10-inch diameter pipe, together with the 12-inch main on Floating Feather Road, make up the trunk system. Some short cul-de-sac streets that have generally ten or fewer houses and no fire hydrants except at the entering intersection are served by 4-inch (and, rarely, 2-inch) laterals with terminal blow-off valves. User count as of October 31, 2004, was 1,248; and generally, each user has one meter. The system has 138 hydrants, 403 shut-off valves of varying sizes (listing by size is not available), four pressure reducing valves defining the two pressure zones and the intertie, 76 blow-offs and 5 coliform sampling stations.

5.2 Capital Replacement Plan

Infrastructure components and significant scheduled maintenance functions have been separated by category and assigned an action interval based on standard system life expectancy and anticipated duty cycle of components. Operation and maintenance costs including a sinking fund for equipment replacement are predicated on the following table.

CAPITAL ITEMS REPLACEMENT / MAJOR MAINTENANCE POLICY		
DESCRIPTION	ACTION	INTERVAL
Service Meters	Replace	20 years
Well pumps & motors	Service or rebuild	10 years
Electrical gear	Safety Inspection	10 years
Standby power units	Diagnostic test, engine	5 years
"	Inspect & test alternator	5 years
Buildings	Inspect and paint	10 years
"	Asphalt-shingle roof	20 years
Diaphragm-actuated Valves	Test functioning	Annual
"	Internal inspection	10 years
Gate & butterfly valves	Exercise-test	Annual
"	Rebuild or replace	80 years
Line pipe	Flush	5 years
"	Sonic leak check	20 years
"	Replace	80 years
Fire hydrants	Test function (flush)	5 years
"	Fire flow test	Random

5.3 Capital Replacement Schedule 2005 to 2025

Year	Item	Present Value	Probable Cost
2005	Master Plan Update	\$ 50,000	\$51,000.00
2006	None expected	-	-
2007	"	-	-
2008	"	-	-
2009	"	-	-
2010	"	-	-
2011	50 water meters	\$10,500	\$12,061.20
2012	50 water meters	\$10,500	\$12,302.42
2013	50 water meters	\$10,500	\$12,548.57
2014	Master Plan Update & 50 meters	\$40,500	\$49,369.27
2015	50 Water Meters	\$10,500	\$13,055.43
2016	50 Water Meters	\$10,500	\$13,316.54
2017	50 Water Meters	\$10,500	\$13,582.87
2018	50 Water Meters	\$10,500	\$13,854.53
2019	50 Water Meters	\$10,500	\$14,131.62

2020	50 Water Meters	\$10,500	\$14,414.25
2021	50 Water Meters	\$10,500	\$14,702.53
2022	50 Water Meters	\$10,500	\$14,996.59
2023	50 Water Meters	\$10,500	\$15,296.52
2024	50 Water Meters	\$10,500	\$15,602.45
2025	Rebuild Well 1 & 50 Meters	\$160,500	\$243,264.45

In addition to the capital replacement items tallied above, a bond-financed capital system improvements project is planned, tentatively scheduled for Year 2006. This project will include construction of the recommended 1.0 million gallon Sports Park Reservoir, construction of the recommended Brookwood Well, replacement of the well house at Well No. 1 to mitigate security and wellhead protection concerns and addition of standby power at Well No. 1. Probable present worth of this project is \$1,950,000 and probable expenditure when scheduled is \$2, 069,355.60.

This listing of capital replacement items and debt-financed capital improvement items includes only those items that serve or will serve the existing "Lexington" system. Capital items required for expected system expansion are discussed in Chapter 6.

6

6.0 CAPITAL IMPROVEMENT AND EXPANSION PLAN

6.1 Capital Improvement Plan for Current Service Area (Floating Feather Road developments in the area generally between Eagle Road and Old Horseshoe Bend Road, with some potential adjacent properties being candidates for future service)

The major capital improvements recommended for correction of existing system deficiencies in the current service area are as follows.

1. New well house and standby power for Well No. 1
2. New 1,000,000-gallon service-pressure Eagle Sports Park Reservoir located east of Echo Creek Subdivision No. 3 and Eagle Sports Park
3. New City well, Well No. 3, on the well lot near the intersection of Eagle Road and Floating Feather Road that was granted to the City by the developers of the Brookwood subdivisions or at an equivalent site.
4. City Well No. 4, as provided for in system's existing water rights: currently a contingency plan, dependent on the degree of success experienced in completing Well No. 3.

There may also be some remaining distribution lines to be completed. If so, these would be project improvements in the developments concerned, and hence are not enumerated in this plan. The proposed reservoir location shown in a localized map in Appendix E.

The priority order for adding these improvements is the order in which they were named, for the following reasons.

1. The replacement of the well house and addition of standby power has the highest priority, in the light of the policy revisions called for at all levels of government in the aftermath of the terrorist attacks of September 11, 2001 on the World Trade Center and the Pentagon Building. The current well house is lightly built and could be broken into quickly by breaking through the wall with a sledgehammer. It should be replaced with a reinforced-masonry structure with steel doors. Standby power at this well should be installed at the same time, as a safeguard against power-supply (for instance, at a substation) sabotage.
2. The reservoir recommended to be built east of the Sports Park property has the next highest priority, to ameliorate the pressure swings that can occur when there are very high withdrawal rates at lower elevation points in the system, and to assure that the system will have its own water reserve for fire fighting. (Based on 30-year financing of \$1,320,000 at a probable

tax-free municipals open market rate of 4.625% per year and 1,350 users, the probable per- residential-unit cost of this reservoir would be \$5.08 per month or about \$60.96 per year; definitely affordable.)

3. The well at the Brookwood site will add another measure of reliability by assuring that the system cannot be denied a source of water by a single localized destructive event (such as a lightning strike).
4. Well No. 4 is currently a contingency plan, to be reviewed and possibly scheduled for completion after results of completing Well No. 3 have been assessed.

6.2 Expansion Plan

The trunk-line network concept for system expansion in the Western Expansion Area is shown in the *Pressure Zone Map and Preliminary Trunk Line Locations Map* in Appendix C. This map also shows the approximate location of the proposed site for a 1,500,000-gallon Western Reservoir (and eventually for a second 1,500,000-gallon reservoir in addition) near the north end of Hartley Road (a county road), and tentative general locations of required new supply wells. Application for site approval from BLM has been submitted and action has not been taken at this time, pending an environmental review scheduled for the spring of 2005. In the event that this site cannot be obtained, the foothills area has other locations that would be physically suitable alternative storage sites. These other locations are on private land, but it is probable that some suitable location can be acquired in the course of development of the area.

Construction of water facilities in the system expansion area, which includes all the area within the zone shaded on the map that is not served by the system now, will be synchronized with land development location-by-location, and funded by developers, to the extent possible. There are some alternative methods for funding improvements; however, some of the available alternatives depend on the individual project and the outcome of a public process. Funding approaches may include "developer extensions" (directly funded by developers and granted to the City upon completion), which in some instances might be partially repaid over time through "latecomer agreements" (authorizing future payments to developers for benefits to property beyond the development), the issuance of revenue bonds, and bonds secured by assessments levied under duly formed local improvement districts defined to match subdivision (or other development project) boundaries. In this report, the probable total cost of required system improvements is calculated and divided by the probable total number of new Equivalent Residential Customers ("ERCs") to derive System Improvements Fair Share quotient which is presented as the recommended input per unit for system improvements that should be supplied, either in funds or in kind, by each developer in the Expansion Area. Since the

system in the expansion area is new, there are no existing system deficiencies there to be made up by other sources.

At each stage of construction, the City will require that distribution, supply and reserve standards per IDAPA regulations and fire flow and duration of emergency supply requirements per applicable fire code and Fire District standards be fulfilled, as conditions of development approvals. The effect of fire demand on the available flow and duration requirements will possibly require providing a majority of the required well supply in the earlier phases of system construction, relative to the comparable supply-system fractions in subsequent water-system construction. It is recommended that "latecomer agreements" be employed to restore equitability of the water construction burden over time. Relatively early construction of the planned reservoirs will be a policy goal, but combinations of backup wells and standby power systems that have the required aggregate flow capacity and afford a high degree of redundancy may be used as an interim measure until the number of services becomes sufficient, in the judgment of the City Council, to make construction of reservoirs affordable by users in their service areas.

In a more detailed conceptualization, this development process and funding methodology is envisioned as generally a five-phase sequence, in which the supply and trunk line systems for blocks of land would be constructed in projects financed by developer extensions authorized through duly drawn development agreements or under other arrangements permitted by Idaho law. Lands not directly building their "fair shares" of system improvements would be required to "buy in" with a combination of "latecomer fees" and "hookup fees", which would be set on the basis of the System Improvements Fair Share value as determined in this report or as may later be amended based on periodic formal review of the cost levels that form the basis of this value, at such time as they might develop, as well as to provide the local service main extensions they require, as developer extensions. "Latecomer fee" obligations set by earlier "latecomer agreements" would apply regardless of the mode by which an extension might be financed. Major trunks shown on the *Water Pressure Zone Map* as preliminary trunk line locations would be built generally in the locations shown, but alignment might vary to accommodate specifics of plans by developers as those are produced. Development blocks envisioned as of this writing are shown on a map in Appendix C entitled "*Development Blocks Plan Map for Water Supply and Trunk Lines*". Development Blocks 1, 2 and 3 are probably generally representative of the development sequence of the area between Highway 44 and Beacon Light Road, enough so that there is reasonable confidence that the general timing of developments will be in the numerical order here assigned, although the boundaries of discrete construction stages may vary considerably from those described in the following text. Actual times of occurrence of developments in Development Blocks 4 and 5 might be intermixed with times of completion of developments in other blocks, and with each other. These blocks are

enumerated last principally because orderly development of their water system parts would work best if they were postponed until the system improvements in Blocks 1, 2 and 3 are complete.

6.2.1 Preliminary Design for Expansion Area

The preliminary distribution system design for the Western Expansion Area is based on a trunk line skeleton consisting of two joined principal trunk loops mostly following major travel routes, using 16 inch pipe, outlining and approximately bisecting the area between Highway 44 on the south, Beacon Light Road on the north, a line generally parallel to and about a quarter-mile west of Linder Road on the east (variable to accommodate individual developments), and Palmer Lane on the west, with the bisecting pipe running along the proposed "East-West Boulevard" shown in the transportation plan of the 2004 Comprehensive Plan. These major loops would be augmented by a 12 inch diameter pipe parallel to Floating Feather Road that would function as the manifold receiving the output of three or four supply wells planned in that general area. Streets where trunks and sub-trunks are not located would be served by laterals, which would be "project improvements" from the viewpoint of capital improvements planning. All public water supply pipes are to be "looped" to the fullest extent possible: as a policy, every lateral is to be connected to other lateral or trunk lines at both ends. Stubs for future connection are required wherever future road extension is possible. Adequate sizing of laterals must be demonstrated by valid techniques of flow network modeling, using peak hour peak day system demand and fire flow values appropriate for the largest buildings possible in the zone. The proposed Western Reservoir installation near the north end of Hartley Road is to be joined to the distribution system by a 20-inch transmission line. Wells will deliver directly into the distribution system and are expected to be in distributed locations, with three or four being located in the central core area inside the major loops, one being located at a northeasterly site (to be determined later) and one or two being located south of Highway 44. Well siting will be interactive with events as development proceeds, and may come to be modified considerably from the pattern described. Hydraulic performance of the distribution system will not be highly sensitive to the details of well siting. Probable total planned system improvement pipe quantities are 10,000 feet of twenty inch, 76,000 feet of sixteen inch, and 7,000 feet of twelve inch at full build-out. The probable quantity of smaller distribution laterals that will be required is very approximately 600,000 feet, but this quantity is dependent on actual geometry of future developments, and these improvements are not included in probable cost opinions given here because they will be "project improvements" in capital planning terms and will be required to be financed entirely as developer extensions. The aggregate probable cost of these system improvements, based on Year 2004 cost levels and deducting as a project improvement the cost of equal lengths of 8-inch laterals where applicable, is \$13,400,000.

Anticipated build-out population of the Western Expansion Area west of Linder Road is 22,000, based on zoning recommendations of the 2004 Comprehensive Plan. Average water use is projected at 120 gallons per capita per day, based on a small-urban development pattern that includes commercial and light industrial zones in addition to residential zones. It is projected that peak day use will be 1.6 times average use and peak-hour use will be 1.5 times same-day average use⁶. At these values, system average demand will be

- 2.64 MGD, equivalent to 1,833 gpm,
- peak day demand will be 4.224 MGD, equivalent to 2,933 gpm, and
- peak hour of peak day will be 6.336 MGD, equivalent to 4,400 gpm

Distribution system design is based on a fire flow in the expected commercial zone of 3,000 gpm, occurring concurrently with peak-hour-of-peak-day demand. A preliminary single-loop head loss calculation, with an assumed pattern of withdrawals selected to be roughly representative of full-development occupancy patterns, was performed assuming 7,400 gpm total flow and 3,000 gpm fire flow, for hypothetical fires at two points along the Highway 44/ Moon Valley Road trunk corridor. Calculations were manual, solving for approximately balanced head losses in parallel flow paths. These calculations provide a very conservative prediction of the water transmission capacity of the completed system, because they disregard the water conveyance capacity of lateral loops within the major loops. Assumptions were that

1. all storage water will be stored at the Western Reservoir site,
2. 3,000 gpm fire demand, and
3. 4,400 gpm coincident demand (representing peak hour of peak day for a build-out service area population of 22,000).

Using 16-inch trunks and a 20-inch reservoir transmission line, this calculation showed residual pressure at the fire location to be within 1 psi of the required value of 20 psi, in both cases. Whereas interconnected laterals were disregarded, and their effect would be to reduce overall head loss between points, this demonstrates that these are adequate pipe sizes.

Planned Western System reservoir volume of 3,000,000 gallons total (two tanks at 1,500,000 gallons each) provides the following storage components:

1. Cycle minimum 200,000 gal. = 1.7 volumes of transmission line or 60 min. at peak day flow.
2. Equalizing reserve 950,000 gal = 0.225 times peak day volume.

⁶ Reference for peaking coefficients: Table 3.6, AWWA Treatise Water Distribution Systems Handbook, copyright 2000, McGraw-Hill. Lower end of the stated ranges of coefficients was favored because area has separate irrigation system.

3. Fire and concurrent flow reserve 1,420,000 gal. = 4 hours at 3,000 gpm fire flow and peak-day concurrent flow of 2,933 gpm.
4. Post-emergency reserve 257,000 gal. = 10% of sum of 1 through 3.
5. Sediment capture reserve 128,500 gal. = 5% of sum of 1 through 3.

The sum of these identified reserve components is 3,006,900 gallons, confirming the planned total size of two tanks of 3,000,000 gallons.

Until reservoirs are built, the supply requirement will be that the wells must produce the larger of the peak hour peak day peak day flow or the fire flow plus peak day average flow with any one well out of service. The flow rate that this will equal will vary as development proceeds, but the criterion must be satisfied at every stage of development. After reservoirs are built, the required supply flow will be the peak day average flow, with any one well out of service. At build-out, this value for the western area (west of Linder Road) is calculated to be 2,933 gpm. Assuming wells with 1,000 gpm capacity, this would require a minimum of three wells functioning at all times, and hence a minimum immediate need of four wells in the western system. The planned number of five wells in the western system makes allowance for the possibility that the 1,000 gpm assumed flow per well might not be realized at every well. The plan also includes a well in the Beacon Light Road area (a separate pressure zone), for which the backup would be the planned two wells and reservoir in the "Lexington" area (the present system).

The aggregate probable cost of these system improvements⁷, based on Year 2004 cost levels, and deducting as a project improvement requirement the cost of equal lengths of 8-inch laterals where applicable, is \$13,379,500. Anticipated buildout population (based on zoning) of the entire New Service Area (exclusive of the Lexington area) is 26,000. At a rate of 2.87 per ERC (per U. S. Census, Year 2000), this implies 9,059 ERCs. Round to 9,000. Imputed System Improvement Fair Share quotient is $\$13,379,500/9,000 = \$1,486.61$. Round to \$1,500.00 per ERC.

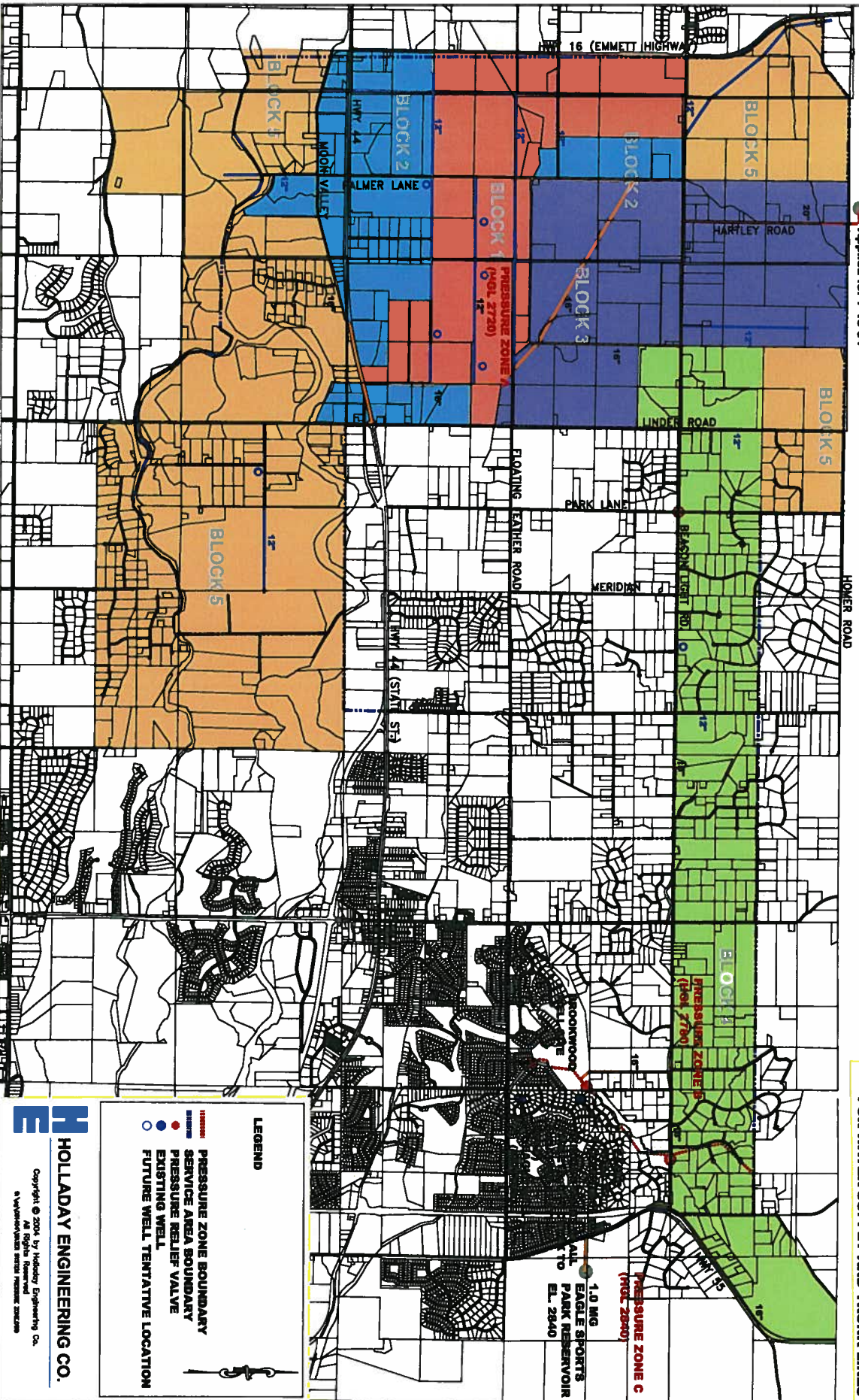
6.2.2 Envisioned Development Blocks

The development blocks shown on the *Development Blocks Plan Map* (following page) represent the apparent probable progression of development of property, and hence the expected sequence of need for municipal water service. Block 1 represents properties that are newly annexed or pending annexation thus

⁷ Idaho Statutes 67-8203(28) "System improvements," in contrast to project improvements, means capital improvements to public facilities which are designed to provide service to a service area including, without limitation, the type of improvements described in section 50-1703, Idaho Code.

1.5 MG
WESTERN RESERVOIR SITE
EL. 2720
Applied for 7-15-04

CITY OF EAGLE
DEVELOPMENT BLOCK PLAN MAP
FOR WATER SUPPLY AND TRUNK LINES



LEGEND

- PRESSURE ZONE BOUNDARY
- SERVICE AREA BOUNDARY
- PRESSURE RELIEF VALVE
- EXISTING WELL
- FUTURE WELL TENTATIVE LOCATION



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representing the immediate need for water service. The remaining four phases represent future water service need. The probable costs associated with the development block described below do not include the cost of expected service lateral lines.

BLOCK 1: "Floating Feather Road Block"

This block includes a contiguous group of properties now in some stage of the process of annexation, aligned generally along and lying mostly on the south side of Floating Feather Road between Linder Road and State Highway 16, comprising a probable total of 1,000 acres, more or less, expected to be annexed in 2004/2005.

The required system improvements (supply and trunk lines – assuming that distribution lines of lesser diameter than 12 inch will be extended by developers at their direct expense) are expected to include:

- a. Three supply wells, desired capacity 1,000 gallons per minute each, each equipped with a control system setting in a lead-lag configuration, variable-frequency-drive pressure control, standby generators capable of meeting full maximum load, and pressure tank or equivalent for night operation.
- b. 6,000 lineal feet, more or less, of sixteen-inch diameter trunk line (as shown for the principal system loop on the *Pressure Zone Map*), lying along the Palmer Lane and Linder Road trunk corridors.
- c. 7,000 lineal feet, more or less, of twelve-inch diameter supply manifold line, lying generally south of and parallel to Floating Feather Road, receiving the water pumped from the wells and connecting to the 16-inch mains that run north-south.

The probable budget cost of improvements for this block, including allowances for engineering and financing services, at recently-experienced price levels, and deducting as a project improvement requirement the cost of equal lengths of 8-inch lateral where applicable, is \$2,166,000

BLOCK 2: "Beacon Light and Highway 44 Block"

This block includes some expected annexations between Beacon Light Road and Floating Feather Road, together with properties lying along State Highway 44. An aggregate of about 1,000 acres is considered probable, and it is expected that this block will include mixed-use and commercial developments requiring higher fire flows than required by Block 1 alone. This requirement for higher fire flows will make extension of sixteen-inch trunks a priority.

The expected system improvements include:

- a. One well, desired capacity 1,000 gallons per minute each, with single pump, variable-frequency drive and standby power. When complete, this well will fill out a supply system capable of 3,000 gallons per minute production even with one well out of service for repairs.
- b. 15,000 lineal feet, more or less, of sixteen-inch-diameter trunk line, lying along State Highway 44 and extending up Palmer Lane to Beacon Light Road.

The probable budget cost of these improvements, at recently-experienced price levels, and deducting as a project improvement requirement the cost of equal lengths of 8-inch lateral where applicable, is \$1,562,000.

BLOCK 3: "Beacon Light and North Block"

This block includes probable annexations in the "Village" area identified in the 2004 Comprehensive Plan, as well as probable adjacent areas north and south of Beacon Light Road and west of Linder expected to be zoned residential, and is expected to comprise 1,200 to 1,500 acres. Commercial and mixed uses in the "Village" area will amplify the requirement for fire fighting capability. Construction of a 1,500,000 gallon Western Reservoir at the already selected foothills site as a part of the improvements for this block will improve the efficiency of the supply system and increase the maximum reliable fire flow, by providing storage for both flow equalization and fire reserve. In this way, this block's necessary addition to supply capacity will be contributed without adding more wells. Completion of the primary sixteen-inch trunk loop will enhance pressure steadiness and fire fighting capacity at all points in the original two blocks, as well as give the necessary distribution system delivery capacity for the potential fire demands of the "Village" area.

The expected system improvements include:

- a. 1.5 million gallon Western Reservoir and 10,000 lineal feet, more or less, of twenty-inch reservoir transmission line along parts of Palmer Lane and Beacon Light Road, Hartley Road, and to the tank.
- b. 15,000 lineal feet, more or less, of sixteen-inch trunk lines.

The probable budget cost of these improvements, at recently-experienced price levels, and deducting, as a project improvement requirement, the probable cost of equal lengths of 8-inch laterals where applicable, is \$2,893,000.

BLOCK 4: "Beacon Light East Block"

This block includes areas north of Beacon Light Road and east of Linder Road that might be brought into the water system in the intermediate-range future. The

principal core-system objective to be met by improvements in this block is interconnection of the newer system in the Western Expansion Area and the existing City system in northeast Eagle.

The expected system improvements include:

- a. One well in the block.
- b. A pressure-reducing-valve station near the intersection of Beacon Light and Linder, to function as a separation of pressure zones.
- c. 35,000 lineal feet, more or less, of sixteen-inch-diameter trunk line to connect the Western Expansion Area and Northeast Eagle distribution systems.

The probable budget cost of these improvements, at recently-experienced price levels, is \$4,970,000. The development that may occur in this service area is expected to be spotty, probably consisting of a more or less steady trickle of small replats. However, bond financing and single-project construction of the supply and trunk improvements recommended for this area is appropriate on a public health and safety basis, because of the need for fire protection.

BLOCK 5: "Riverside Block"

This block includes areas south of Highway 44, together with expected infill in the areas assigned to Blocks 1, 2 and 3. Some installation of laterals of diameter greater than 8-inch is probable in the Riverside area, but its main effect on the system will be to increase average daily demand on the supply system. With the wells installed in Blocks 1 and 2, the flow demand can be met by one additional well and enhanced storage for flow equalization.

The expected system improvements include:

- a. 1.5 million gallon Western Reservoir at the foothills site near the north end of Hartley Road.
- b. 5,000 lineal feet, more or less, of sixteen inch trunk line. One well, capacity of 1,000 gallons per minute, with standby power.

The probable budget cost of these improvements, at recently-experienced price levels, and deducting the probable cost of equal amounts of 8-inch lateral as a project improvement requirement where applicable is \$1,789,000. As with Block 4, the process of development of the land in this block will probably be characterized by numerous small developments over time. Even though the households in this block may be slow in connecting to the City water system, availability of fire flow is a major health and safety need that warrants construction of the main and well herein proposed, and justifies the use of bond financing for it.

6.2.3 Financing Plan

6.2.3.1. General Options

General classes of options permissible under Idaho law for financing City-owned improvement construction are by use of funds on hand (subject to some limitations as to the source of the funds), by use of borrowed funds, and by receipt of donations.

The City typically borrows funds for projects by issuing its bonds, promissory notes, or other evidence of its indebtedness. Classes of bonding that may be used by cities are general obligation bonds and revenue bonds. The major distinguishing features of these bond classes are:

- a. General Obligation bonds may only be issued if authorized by passage of a bond election by two-thirds majority of those voting. They are repaid by appropriations from the General Fund of the municipality. Use of General Obligation bonding is normally restricted to projects that benefits or serves the entire municipality and that do not produce a revenue stream sufficient to repay a loan for their construction. They are typically not used for water utility construction.
- b. Revenue bonds may be issued if authorized by passage of a revenue bond election by a simple majority of those voting. They are secured by and repaid from revenues of the facility for which the improvements are constructed. Revenue bonds are widely used for water system projects that benefit the entire municipality, such as treatment plants and storage reservoirs. They are less often used for projects which appear to benefit only localized areas within the whole service area of a utility or the whole municipality, because such projects seldom enjoy the degree of community-wide popularity that is needed for success in a bond election.
- c. Revenue bond borrowing may also in some circumstances be issued on the basis of "judicial confirmation": a ruling by a judge that a particular project is "ordinary and necessary". Water system components have been ruled "ordinary and necessary" by judges in many cases in Idaho, and it is thought that the probability of a favorable ruling is high enough in the cases of the storage reservoirs in this plan that revenue bonding based on judicial confirmation is the mode of choice for financing the reservoirs.

The City may also issue its bonds and pledge the assessments of a duly formed Local Improvement District (LID). LIDs are used by municipalities to fund a wide range of localized improvements. The procedures for forming an LID and levying LID assessments are set forth in Idaho Statutes Title 50, Chapter 17. The form of

indebtedness generated by a LID is distinct from the debt of the other two types of bonds mentioned: it is apportioned to the benefited properties in the Local Improvement District by a system of assessments as provided by Idaho Statutes Title 50, Chapter 17, and becomes a class of liens on the properties within the LID, rather than a debt of the municipality.

There is one donation type that is common in new water utility construction: the developer extension. The procedure is that a developer builds the part of the water system needed to serve his development and formally conveys ownership of the improvement to the municipality, under the terms of a development agreement. If the construction benefits property beyond the development, the City may provide by a "latecomer's agreement" that reimbursement payments will be made by "latecomers" for the benefits they receive, and will be remitted to the developer.

Both construction under an LID and construction by developer extension secure facilities without generating debt for the City, and both can be done without the requirement of an election. There are built-in delays imposed by the procedure of forming LIDs, and the administrative burden of the assessment procedure, as typical disadvantages. In addition, institutional bond buyers typically do not accept LID bonds that are secured by bare land, which limits their usefulness as a tool for expansion. The principal advantage of LIDs, if they can be used, is that the bonds issued for them may be tax-exempt municipal bonds, which typically pay an interest rate about 15% lower than the rate for private loans.

Because of this potential advantage in interest rate, construction funded by LID assessments may be the preferable institutional mode for parts of the water system facilities in the Western Expansion Area.

The construction blocks described in the foregoing text and map are expected to roughly correspond to the areas of the projects that are performed, although specific parcels may quite possibly be included in earlier or later projects than the block map indicates. Also, there is some possibility that more than one block might be included in a single project. It is probable that the first block of development, at a minimum, will not have practical access to LID funding as an option, due to the difficulty of selling bonds secured by bare land, and will therefore necessarily have no effective funding option except developer extension.

6.2.3.2 Financing Recommendation

Based on the foregoing, the recommended plan for financing the system improvements is as follows:

First, adopt the System Improvement Fair Share quotient as the standard per-dwelling investment in system improvements to be received from developers as a standard feature of development agreements in the planning area. Institute a holding account for Fair Share funds, in anticipation of a time in the future when there might be temporary Fair Share credit balances. Require that each development provide its Fair Share obligation, computed as planned number of ERCs multiplied by the System Improvements Fair Share quotient. Base imputed compliance on a combination of in-kind contributions (for building specific parts of the system improvements as elements of development construction) and monetary payments. Calculate the amounts to be recovered through Newcomer Agreements based on the Fair Share quotient where applicable. Update the determination of the Fair Share quotient every two years at a minimum.

Charge established rates for service. In the early years of the system's existence in the Expansion Area, this will generate a balance that can be used for debt service. It is projected that at about the time the total number of ERCs connected in the Western Area reaches 1,000, this available cash flow will become sufficient to pay the debt service for a bonded loan on the first Expansion Area water tank. When this cash flow is found to be sufficient to assure that the debt can be repaid from revenue, seek judicial confirmation to issue the required bonds, and build the reservoir.

Since the Lexington area already has a large enough number of users connected, seek judicial confirmation for bonding and proceed with construction of the required system improvements for this part of the system as soon as the necessary arrangements can be made.

In later stages of construction of the first three blocks, a balance of Fair share funds should accrue. Employ these funds to advance system improvements in Blocks 4 and 5 as possible. Finally, Fair Share funds may continue to accrue after system improvements are complete. Such accrual would be, in effect, the recouping of the costs of items built earlier by bonding. It is anticipated that there would be less than complete recovery of these amounts through subsequent Fair Share payments, if in fact there is any, because full build-out will probably be slow in coming in the Riverside and Foothills areas. Any apparent surplus should be directed to the system's Emergency Fund and its Capital Replacement Fund.

6.2.4 Operation Plan

The Western Expansion Area improvements are expected to rapidly grow to a system size warranting a City staff department for operation. The principal reason that in-house operating staff is recommended is responsiveness to the elected officials who have ultimate responsibility to the citizens.

The general plan for implementation of in-house operating staff responsibility is recommended as a four-step process that allows the City to develop a public works staff over several years.

Step 1

Contract with a water system operating service to perform operator functions in the Western Expansion Area as the first new construction is brought on line. City Engineer to prepare (to include reviewing and compiling those elements received from developers) as-built drawings, system map, operation and maintenance manual, and to amend emergency response plan, source protection plan, and monitoring and compliance plan to reflect added facilities as they are completed.

Step 2

At such time as system size is found to have increased enough to warrant payment of staff salary in lieu of contractor fees, hire a Class III (or higher class) Water System Operator (preferably – although system will probably be Class II in its early years) as Water System Superintendent, to report to the City Facilities Manager. This employee's initial duties will be to set up equipment, inventory, and service recording systems, to set up location books for detailed recording of locations (plan position and depth) of all new distribution system infrastructure as it is installed, review sanitary and leak detection testing of all new distribution system infrastructure, review and confirm information on as-built drawings, set schedules for routine maintenance activities, and perform or superintend system operation, scheduled maintenance, sampling and meter reading as and after newly constructed system elements are placed in service. Ideally, the "Lexington" system would remain under contract operation by UWO until, at the very least, the Block 1 area is built and the Block 1 portion of the system is in routine operation.

Step 3

When and as work volume warrants it, hire more operating staff to report to the Water System Superintendent. As more blocks of the system are built, it is expected that there would be a natural progression of staff size increase.

Step 4

When the new system in the Western Expansion Area reaches a number of users comparable to the number in the Lexington-Brookwood area, operation of the "Lexington" system should be assumed by the City staff. This criterion will probably be met at about the time of completion of Block 2 Source and Trunk construction. It is expected that a staff expansion would be needed in order to effect this assumption of operating responsibility.



7

7.0 DOCUMENTATION OF WATER RIGHT AND QUALITY MONITORING

7.1 Water Right

IDWR Permit 63-12448 (Noteworthy: 3.25 cfs)
IDWR Permit 63-11413, (Noteworthy: 4 points of diversion)
IDWR Permit 63-12017
IDWR License 63-9331
Boise Valley Irrigation Co., 4.5 shares

The water rights providing supply to the subject water system are IDWR Permit 63-12017, IDWR Permit 63-11413 and IDWR Permit 63-12448. The history of acquisition of these rights includes, originally, donation as part of the Lexington Hills water system that was donated to the City by the developer. A public protest in response to the City's plan to construct a new well for the system at a site in the Brookwood development area culminated in a formal hearing conducted by the Idaho Department of Water Resources. The FINAL ORDER IN THE MATTER OF APPLICATION FOR AMENDMENT OF PERMIT NO. 63-12448 IN THE NAME OF THE CITY OF EAGLE, issued by the IDWR on Sept. 22, 2005, subsumed the history of these rights and defined their current status and their interapplicability, and re-asserted their legitimacy and the fact that they are right held by the City of Eagle. Accordingly, for the purpose of clarity and in the interest of restricting reference data to what is current, this order is included in Appendix A ("Ownership Documents") as the full evidence providing that the City has these water rights. Some older documents evincing land title to well sites are also included in Appendix A together with an assortment of documents showing the original donation of the water rights.

Additional municipal water rights will be required to meet the supply of the expanding City and the conversion of agricultural land to urban uses. The City will use a phased approach in obtaining water rights consistent with the Water System Master Plan and planning horizon of the City of Eagle Comprehensive Plan. An additional 8.9 cubic feet per second (cfs) will be required to meet the immediate needs property recently annexed (Legacy Development) and for other properties currently under consideration for annexation in Block 1 of the western expansion area as described in Section 6.2.2. As owners of lands in the comprehensive planning area seek City annexation, subsequent phases of the City Water System Master Plan will be implemented with the consequence that added water right and supply may be required.

Water Quality Monitoring

The most recent water quality monitoring that has been performed for this system has been reported by the system operator, UWO, in the 2004 WATER QUALITY REPORT, CITY OF EAGLE, which is presented in the format of, and serves as, the annual Consumer Confidence Report required by the Federal Safe Drinking Water Act. A copy of this report is included in Appendix H. This report demonstrates that the system conforms to all Maximum Contaminant Limit standards and also to all Maximum Contaminant Limit Goal standards currently in effect. In addition, current Microbiological quality standards are not only met, but exceeded, as there has been no detection of microbes by the pertinent tests. The water tested is the water from Well No.1, as Well No.2 is in off-line reserve status due to known excessive sand, hydrogen sulfide and iron contents.

8

8.0 MONITORING AND COMPLIANCE PLANS

8.1 Monitoring Plan

Sampling is performed by qualified employees of the system operator, UWO. Analysis of samples is performed by a certified drinking water laboratory maintained by or contracted by the system operator. Currently, the system's sole source is Well No. 1. Monitoring frequencies for various categories of contaminants reflect the excellent quality record of this well, which has been in use for approximately 13 years.

Monitoring frequencies and numbers of samples

1. Primary and Secondary Inorganic Contaminants (refer to 40 CFR 141.23): one sample at the well every three years
2. Organic Contaminants except Trihalomethanes: one sample at the well every three years
3. Trihalomethanes: one sample per year at a point maximally distant from the well
4. Radionuclides: one sample at the well every four years
5. Coliform bacteria: two samples per month, taken at in a set rotation from five established sampling sites in the system (see Appendix H, "Coliform Sampling Plan")
6. Lead and Copper: required corrosivity indicators, at three tap sites once every three years. Required lead and copper samples at 20 tap sites (based on system having grown beyond a service population of 3,300 recently) every three years

8.2 Compliance Plan

Compliance actions, in general, relative to all results of monitoring, are;

1. Report all test results to DEQ on a timely basis as required by 40 CFR 141 for each specific test category.
2. Publish an annual Consumer Confidence Report based on the test data, as required by 40 CFR 141, Subpart O.
3. In the event of any Maximum Contaminant Level exceedance shown by any sample analysis performed under the Monitoring Plan, consult with DEQ to define the specific response program required, and commence and perform the required response in a timely manner.
4. In the event of bacterial or nitrate/nitrite limit exceedance, give prompt public notification at the first instance, and follow with added information as retesting procedure and further response actions are carried out.

LEXINGTON HILLS #1

WQ Sampling History

= future monitoring requirements

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
IOCs	IOCs	NO3	NO3	IOCs	NO3	NO3	IOCs	NO3	NO3	NO3	NO3	NO3	NO3	IOCs
		2 A/B	3				U	Pb/Cu	DBPs	DBPs	Pb/Cu	DBPs	DBPs	Pb/Cu
		Ra 226	A/B		Pb/Cu	Ra 226		Pb/Cu	DBPs	DBPs	DBPs	DBPs	DBPs	DBPs
			U			Ra 228	Pb/Cu	DBPs	NO2	DBPs	DBPs	DBPs	DBPs	DBPs
						DBPs		Arsenic			Arsenic			Arsenic
						Pb/Cu		Arsenic			Sodium			Sodium
								Sodium			Alpha/Beta			
											Ra 226/228			
											Uranium			

VOCs	VOCs	VOCs	VOCs	VOCs	VOCs	VOCs
------	------	------	------	------	------	------

[illegible]

Information provided by United Water Idaho.

9

9.0 SOURCE PROTECTION PLAN

Currently the system operator applies the provisions of the United Water Idaho source protection plan in its operation the Eagle City system. General source protection practices that are followed include:

1. Well houses shall not be used for storage of any chemicals except those applied for water treatment (chlorine and corrosion inhibitor, as of the time of this writing).
2. Well house access is limited to operating staff and persons they admit. No person shall be admitted into a well house unless a member of the operating staff is present.
3. Well sites are routinely visited by maintenance personnel in the course of operation and any potential source of contamination is immediately noted and the City is notified for action to protect the site.

A Source Water Assessment Final Report, Appendix H, was prepared by DEQ that defined the potential for water contaminants for both Eagle Well No. 1 (Lexington Hills No. 1) and Eagle Well No. 2 (Lexington Hills No. 2). It evaluated the immediate area and transportation corridor uses. In the Susceptibility Summary, the report states,

“Except for Well No. 2 IOCs, both wells rate moderate for all categories. Well No. 2 automatically rates high for IOCs due to MCL violations (due) to hydrogen sulfide, manganese, and iron.”⁸

⁸ Lexington Hills Inc. EM2 (PWS 4010201) Source Water Assessment Final Report, January 24, 2002, pg 15

10

10.0 SYSTEM BUDGET

10.1 General Comments:

Projected annual budgets for the existing ("Lexington Hills") system are based on a twenty-year total-cash-flow projection that was performed as part of the most recent rate study (to August 2004). The City's water account includes operating monies, capital replacement and improvement reserves, and the emergency reserve. Recommended minimum combined emergency operation and repair reserve is \$40,000, which is considered to be the probable cost of emergency repair of a combination of a well pump, pump control electrical panel and standby power unit following a worst-case lightning strike event.

Funding and budgeting categories listed herein reflect the specific conditions of the operating agreement with UWO (see Appendix B for text of agreement). All those cost items provided for UWO's base operating fee are subsumed into the single line "Operator Fee".

Item definitions are:

- **Starting Balance:** probable balance of the Water Fund on Oct. 1 starting the fiscal year.
- **Operator Fee:** The probable annual total of ordinary payments to UWO, the operator of the system under contract with the City. Financial responsibilities of operating company include operator staff labor, electrical energy, treatment supplies, testing lab fees, and repairs not on capital schedule and less than a contractual cost limit. Functions of operating company include monitoring, sampling/testing, meter reading and billing, operating oversight, sanitation, repairs, scheduled maintenance and inspections and miscellaneous duties.
- **Water Sales:** The probable total of amounts billed to users by monthly billings at the rates in the water rate schedule (not including hookup fees). Calculation assumes that rates will be reset every four years, and the rate change will mirror inflation in the interim. These assumptions are presented as probabilities, not as recommendations, and are subject to change by Council action at any time.
- **Hookup Fees:** One-time fees for new construction, currently \$850 per house.
- **Investment Interest:** Anticipated interest on invested water account funds.
- **Staff Overhead:** Probable payroll costs of City staff work related to water system, including fiscal oversight, audit, engineering oversight, and liaison function of City Facilities Manager.
- **Capital Improvement:** Probable cost of planned capital improvement. List does not include reservoir, because it is anticipated that an LID will be

formed to finance it, and the payments would not pass through the water account in this case.

- Ending Balance: Approximate summation of debit and credit items previously listed (i. e., the items foregoing). Actual computation was dollars and cents, but the listing here is rounded for sake of brevity to the nearest dollar; hence columns as shown may have slight discrepancies.

10.2 Five-year Budget

The following five-year budget was prepared absent the property recently annexed and absent property currently in the process of annexation. It reflects the capital improvement program in place and current rates. Current negotiation and administrative action on the part of the Council will, when completed, will allow this budget to be reassessed beginning with the 2006 fiscal year starting October 1, 2005.

Year	2005/6	2006/7	2007/8	2008/9	2009/10
Budget Item					
Starting Balance	\$168,508	\$163,316	\$202,257	\$213,894	\$238,445
Emergency Fund	\$25,000	\$25,500	\$26,010	\$26,530	\$27,060
Operating Reserve Fund	\$25,000	\$25,500	\$26,010	\$26,530	\$27,060
Capital Replace Fund	\$118,508	\$112,316	\$150,237	\$160,833	\$184,320
Ending Balance	\$163,316	\$202,257	\$213,894	\$238,445	\$255,350
Water Sales	\$330,121	\$333,422	\$470,595	\$494,483	\$494,483
Hook-up Revenue	\$21,250	\$21,250	0	0	0
Investment Interest	\$3,960	\$4,390	\$5,707	\$5,849	\$6,740
Staff Overhead	\$22,440	\$22,889	\$23,347	\$23,814	\$24,290
Operator Fee	\$287,083	\$297,232	\$310,494	\$321,142	\$329,203
Debt Service	0	0	\$130,825	\$130,825	\$130,825
Debt Interest	0	0	\$97,125	\$95,566	\$93,936
Debt Principal (Start of year)	0	0	\$2,100,000	\$2,066,300	\$2,031,042
Bonded Improvement	0	0	\$2,100,000	0	0
Capital Replacement	\$51,000	0	0	0	0
Probable Average Monthly Bill	\$21.16	\$21.16	\$29.31	\$30.52	\$30.52

Note: Bonded Improvement 2007: 1 MG Reservoir, new well, rebuild existing well house, standby power

Capital Replacements: (Present values):
2005: Master Plan \$51,000

2001 On: 50 water meters/year, @ \$10,500/year
 2014: Revise Master Plan, \$15,000; pump rebuild, \$15,000
 2025: Well No. 1 Rebuild, \$150,000
 City's Investments currently earning 2.35%

Year	2004/5	2005/6	2006/7	2007/8	2008/9
Budget item					
Starting Balance	\$121,836	\$163,092	\$143,985	\$180,327	\$169,836
Operator Fee	270,521	288,630	307,477	321,142	329,203
Water Sales	311,076	323,772	336,469	337,648	377,648
Hookup Fees	42,500	42,500	21,250	0	0
Investment Int.	6,092	9,321	9,422	10,937	11,864
Staff Overhead	22,440	22,889	23,347	23,814	24,290
Capital Imp.	25,500	83,232	0	54,122	165,612
Ending Balance	163,092	143,985	180,327	169,836	40,244

WESTERN AREA CONSTRUCTION TIMETABLE

GENERAL: This timetable is subject to the condition that individual construction projects will be developer initiated and may be accelerated or delayed based on market condition.

PHASE I: Legacy Development Area, in Dev. Block 1

ANTICIPATED SCHEDULE

Start - January 2006

Complete - September 2006

DESCRIPTION

System Improvements - Two wells, capacity of each approximately 1,500 gpm, and 12" and 16" trunks within Legacy and Eagle field developments. Local Improvements - 8" street laterals, installed as developer extensions.

FINANCING

Through negotiation with major developers within Block 1, the developers shall construct the necessary system improvements in lieu of payment of the Storage and Trunk Line (STL) fee of \$1,500 per residential equivalent. Through this process, the City will acquire the necessary essential water rights and production wells, and the developer will realize an overall cost benefit by assisting the City with the appropriation applications, aquifer test, and providing well sites. The City's contribution is limited, on all lines providing local service, to the added cost, if any, of building the required size line relative to the cost of 1/2 line.

SYSTEM IMPROVEMENTS PROBABLE COSTS

Two wells @ \$400,000	\$ 800,000
16" Trunk 3,000 l.f. @ \$110	\$ 330,000
12" Trunk 12,000 l.f. @ \$85	<u>\$1,020,000</u>
Total Direct Cost	\$2,150,000
Contingency 20%	\$ 430,000
Design Engineer 8%	\$ 172,000
Engineer during construction 7%	\$ 150,500
Legal & Financial 5%	<u>\$ 107,500</u>
Probable Budget, Phase I	\$3,010,000

SYSTEM IMPROVEMENT ELIGIBLE COSTS UNDER CITY'S OVERSIZE POLICY

Two wells @ \$400,000	\$800,000
16" Trunk 3,000 l.f. @ \$25 premium	<u>\$ 75,000</u>
Direct Total	\$875,000
Contingency 20%	\$175,000
Design Engineer 8%	\$ 70,000
Engineer during construction 7%	\$ 61,250
Legal & Financial 5%	<u>\$ 43,750</u>
Total	\$1,225,000

PHASE II: Completion of Block 1 System Improvements & Construction of 1.5 Million Gallon Water Reservoir**ANTICIPATED SCHEDULE**

Start – March 2007

Complete – January 2008

DESCRIPTION

System Improvements – One well, capacity 1,500 gpm, one reservoir at the Hartley Lane site; capacity 1.5 million gallons; 20 inch trunk line 10,000 feet; 10 inch reservoir fill line 7,000 feet; 16 inch trunk line 8,000; 12 inch trunk line 15,000 feet. Location – Remainder of Block 1, and trunk to reservoir, and reservoir shown in Block 3. Local Improvements – Associated 8 inch street laterals, installed as developer extensions.

FINANCING

Owners will fund the improvements in this phase through the STL fee. The STL fee is designated for key system capital projects defined by the Water System Master Plan, 2005. Under the City code, a portion of the fee may be waived in lieu of construction of system components. Development block construction of system components may proceed as a single project or as a series of projects based on the demand for services and absorption rate of the residential and commercial market. The \$1,500 STL fee shall be reevaluated each year to reflect changes in the regional construction cost index and local construction costs. The City's contribution is limited, on all lines providing local service, to the added cost, if any, of building the required size line relative to the cost of half-inch line.

SYSTEM IMPROVEMENTS PROBABLE COSTS

		STL Eligible Part
Well 1 @ \$400,000	\$400,000	\$400,000
Reservoir 1.5 million gallons (including drain line & appurtenances)	\$1,200,000	\$1,200,000
20 inch trunk 10,000 LF @ \$130	\$1,300,000	\$1,045,000
1- inch reservoir fill line 7,000 LF @ \$60	\$ 420,000	\$ 420,000
16 inch trunk line 8,000 LF @ \$110	\$ 880,000	\$200,000
12 inch trunk line 15,000 LF @ \$85	\$1,275,000	0
Total Direct Cost	\$5,475,000	\$3,265,000
Contingency 20%	\$1,095,000	\$ 653,000
Design Engineer 8%	\$ 438,000	\$ 261,200
Engineer during construction 7%	\$ 383,250	\$ 228,550
Legal & Financial 5%	\$ 273,750	\$ 163,250
Probable Budget, Phase II	\$7,665,000	\$4,571,000

PHASE III: Development Block 2 (Less Some Trunks Included in Phase II to Connect to Reservoir)**ANTICIPATED SCHEDULE**

Start – March 2009

Complete – January 2010

DESCRIPTION

System Improvements – 16 inch trunk lines, 13,000 lineal feet; 12 inch trunk lines, 23,000 lineal feet. Local Improvements – 8 inch street mains constructed as developer extensions.

FINANCING

Owners will fund the improvements in this phase through the STL fee. The STL fee is designated for key system capital projects defined by the Water System Master Plan, 2005. Under the City code, a portion of the fee may be waived in lieu of construction of system components. Development block construction of system components may proceed as a single project or as a series of projects based on the demand for services and absorption rate of the residential and commercial market. The \$1,500 STL fee shall be reevaluated each year to reflect changes in the construction cost index and local construction costs. The City's contribution is limited, on all lines providing local service to the added cost, if any, of building the required size line relative to the cost of half-inch line.

SYSTEM IMPROVEMENTS PROBABLE COSTS

		STL Eligible Part
16 inch trunks 13,000 l.f. @ \$110	\$1,430,000	\$325,000
12 inch trunks 23,000 l.f. @ \$85	\$1,955,000	0
Total Direct Cost	\$3,385,000	\$325,000
Contingency 20%	\$ 677,000	\$ 65,000
Design Engineer 8%	\$ 270,800	\$ 26,000
Engineer during construction 7%	\$ 236,950	\$ 22,750
Legal & Financial 5%	\$ 169,250	\$ 16,250
Probable Budget, Phase III	\$4,739,000	\$455,000

PHASE IV: Development Block 3 (Remaining Parts) & Land North of Beacon Light Road and West of Palmer Lane Extended, Plotted in Development Block 5.**ANTICIPATED SCHEDULE**

Start – March 2011

Complete – January 2012

DESCRIPTION

System Improvements – Approximately 15,000 lineal feet of 16 inch trunk lines and approximately 15,000 lineal feet of 12 inch trunk lines, plus 8 inch street mains as required. Local Improvements – 8 inch street mains constructed as developer extensions.

FINANCING

Owners will fund the improvements in this phase through the STL fee. The STL fee is designated for key system capital projects defined by the Water System Master Plan, 2005. Under the City code, a portion of the fee may be waived in lieu of construction of system components. Development block construction of system components may proceed as a single project or as a series of projects based on the demand for services and absorption rate of the residential and commercial market. The \$1,500 STL fee shall be reevaluated each year to reflect changes in the construction cost index and local construction costs. The City's contribution is limited, on all lines providing local service to the added cost, if any, of building the required size line relative to the cost of half-inch line.

SYSTEM IMPROVEMENTS PROBABLE COSTS

		STL Eligible Part
16 inch trunks 15,000 l.f. @ \$110	\$1,650,000	\$375,000
12 inch trunks 15,000 l.f. @ \$85	\$1,275,000	0
Total Direct Cost	\$2,925,000	\$375,000
Contingency 20%	\$2,925,000	\$ 75,000
Design Engineer 8%	\$ 585,800	\$ 30,000
Engineer during construction 7%	\$ 234,000	\$ 26,250
Legal & Financial 5%	\$ 146,250	\$ 18,750
Probable Budget, Phase IV	\$4,095,000	\$525,000

PHASE V: Development Block 4**ANTICIPATED SCHEDULE**

Start – March 2013

Complete – January 2014

DESCRIPTION

System Improvements – One well, desired capacity 1,000 gpm, with standing power; a pressure reducing and booster station with standby power near the intersection of Beacon Light and Linder Roads; approximately 35,000 lineal feet of 16 inch diameter trunk line; and approximately 12,000 lineal feet of 12 inch sub-trunks. Local Improvements – 8 inch street mains constructed as developer extensions or limited scope Local Improvement Districts.

FINANCING

Owners will fund the improvements in this phase through the STL fee. The STL fee is designated for key system capital projects defined by the Water System Master Plan, 2005. Under the City code, a portion of the fee may be waived in lieu of construction of system components. Development block construction of system components may proceed as a single project or as a series of projects based on the demand for services and absorption rate of the residential and commercial market. The \$1,500 STL fee shall be reevaluated each year to reflect changes in the construction cost index and local construction costs. The City's contribution is limited, on all lines providing local service to the added cost, if any, of building the required size line relative to the cost of half-inch line.

SYSTEM IMPROVEMENTS PROBABLE COSTS

		STL Eligible Part
1,500 gpm well w/standby power LS	\$ 400,000	\$ 400,000
Pressure boosting/reducing station with Standby power LS	\$ 200,000	\$ 200,000
16 inch trunk 35,000 l.f. @ \$110	\$3,850,000	\$875,000
12 inch sub-trunk 12,000 l.f. @ \$85	\$1,020,000	0
Total Direct Cost	\$5,470,000	\$1,475,000
Contingency 20%	\$1,094,000	\$ 295,000
Design Engineer 8%	\$ 437,600	\$ 118,000
Engineer during construction 7%	\$ 382,900	\$ 103,250
Legal & Financial 5%	\$ 273,500	\$ 73,750
Probable Budget, Phase V	\$7,658,000	\$2,065,000

PHASE VI: Development Block 5**ANTICIPATED SCHEDULE**

Start – March 2015

Complete – January 2016

DESCRIPTION

System Improvements – 1.5 million gallon storage tank at a site not yet selected, approximately 5,000 lineal feet of 16 inch trunk line, approximately 14,000 lineal feet of 12 inch sub-trunk lines, one well, desired capacity 1,000 gpm, with standby power, and a pressure reducing/boosting station complex at the boundary of Block 4 and Block 3 (near the intersection of Beacon Light Road and Linder Road). Local Improvements – 8 inch street mains constructed as developer extensions.

FINANCING

Owners will fund the improvements in this phase through the STL fee. The STL fee is designated for key system capital projects defined by the Water System Master Plan, 2005. Under the City code, a portion of the fee may be waived in lieu of construction of system components. Development block construction of system components may proceed as a single project or as a series of projects based on the demand for services and absorption rate of the residential and commercial market. The \$1,500 STL fee shall be reevaluated each year to reflect changes in the construction cost index and local construction costs. The City's contribution is limited, on all lines providing local service to the added cost, if any, of building the required size line relative to the cost of half-inch line.

SYSTEM IMPROVEMENTS PROBABLE COSTS

		STL Eligible Part
1.5 million gallon reservoir LS	\$1,200,000	\$1,200,000
Reservoir service trunks & drain LS	\$ 850,000	\$ 850,000
5,000 l.f. 16 inch @ \$110	\$ 550,000	\$ 125,000
14,000 l.f. 12 inch @ \$85	\$1,190,000	0
1,000 gpm well & standby power LS	\$ 400,000	\$ 400,000
Total Direct Cost	\$4,200,000	\$2,575,000
Contingency 20%	\$ 840,000	\$ 515,000
Design Engineer 8%	\$ 336,000	\$ 206,000
Engineer during construction 7%	\$ 294,000	\$ 180,250
Legal & Financial 5%	\$ 210,000	\$ 128,750
Probable Budget, Phase VI	\$5,880,000	\$3,605,000

COMMENT: The primary purpose of these improvements is emergency backup for whole system, rather than local service.

GENERAL: Based on current cost levels, the anticipated total proceeds from the STL fees is about \$13,500,000. The sum of STL eligible charges enumerated above is \$12,446,000. This leaves an allowance for negotiation that the City may find will promote the public interest.

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Ownership Documents

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Certificate of Incorporation

I, REINHOLD GALT, JR., Secretary of State of the State of Idaho, do hereby certify that the corporation known as the State of Idaho was duly incorporated on the five day of the month of January in the year 1917 under the laws of the State of Idaho. The certificate of incorporation is recorded on the fourth day of February 1917. The corporation is shown on the fourth day of February 1917 as recorded on File No. 1000 in the Department of State of the State of Idaho.

In testimony whereof, I have hereunto set my hand and affixed the Great Seal of the State of Idaho at Boise, Idaho, this fourth day of February 1917.

REINHOLD GALT, JR.
Secretary of State.



AGREEMENT FOR TRANSFER AND OPERATION OF DOMESTIC WATER SYSTEM

Agreement made and entered into this 20th day of May, 1992, between LEXINGTON HILLS, INC., an Idaho corporation, of 2417 Bank Drive, Suite 101, Boise, Idaho 83705, hereinafter "Lexington", TREASURE VALLEY VILLAGE, a California limited partnership, of 680 North 9th Street, Boise, Idaho 83702, hereinafter "TVV", and the CITY OF EAGLE, an Idaho municipal corporation, whose address is City Hall, P. O. Box 477, Eagle, Idaho 83616, hereinafter "City".

RECITALS

A. Lexington is the owner of certain real property situated in the City of Eagle, County of Ada, State of Idaho, more particularly described in Exhibit "A" attached hereto and incorporated herein by reference, sometimes hereinafter referred to as "the Lexington Hills development", for which it has applied for and obtained preliminary approval from the City for a planned unit development, the first phase of which has been platted as Lexington Hills Subdivision No. 1.

B. TVV is the owner of certain real property situated in the City of Eagle, Ada County, Idaho, more particularly described in Exhibit "B" attached hereto and incorporated herein by reference, sometimes hereinafter referred to as "the Echo Creek development", which TVV intends to develop for residential use; the Lexington Hills and Echo Creek developments are sometimes hereinafter referred to together as "the Projects".

C. As a part of the Projects, Lexington and TVV have undertaken and have a continuing obligation to construct a domestic water system designed to serve the respective residents and common areas of the Lexington Hills and Echo Creek projects, hereinafter referred to as the "domestic water system". These Projects are the sole owners of the domestic water system and the sole persons and entities entitled to receive water therefrom other than future owners of property within the Projects.

D. The City desires to acquire the domestic water system, and Lexington and TVV desire to transfer the domestic water system to the City, in phases, as each phase is completed, on certain terms and conditions.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the parties agree as follows:

1. **Definitions.** For the purpose of this agreement, and any amendments hereto, the following terms shall have the meanings hereafter set forth:

The term "domestic water system", as used herein, means the wells, pumps, distribution lines, and storage facilities as required by the Idaho Department of Health and Welfare (DEQ), the well lots, easements for access to the well lots, the well houses, and any and all easements necessary for the maintenance and operation of the water system constructed and to be constructed to serve the Projects.

The term "completion," as it relates to each phase of the domestic water system, shall mean the date upon which the last of the following documents, fully executed, have been delivered to the City: the warranty deed, the warranties, title insurance policies and all lien releases herein agreed to be given to the City for each phase of the system.

The term "Agreed Construction Standards" shall mean *Idaho Regulations for Public Drinking Water Systems*, Idaho Department of Health and Welfare Rules and Regulations, Title 1, Chapter 8 (12-31-91 and as amended from time to time), the most recent edition of the *Idaho Standards for Public Works Construction*, and amendments thereto, *Recommended Standards for Water Works*, (Health Education Services, Albany, N.Y. (1987)), and the *Minimum Criteria for Community Systems on Private Property*, an internal document of the Department of Health and Welfare, Division of Environmental Quality.

2. **Conveyance of Domestic Water System.** Lexington and TVV agree to convey to the City all of their right, title and interest in and to the domestic water system by a series of warranty deeds in the same or similar form as Exhibit "C" for the real property interest and fixtures and by a bill of sale in the same or similar form as Exhibit "D" for all personal property, free and clear of any and all property taxes, liens and encumbrances, to be executed by the applicable owner or owners of record title thereto as each phase of construction of the water system is completed and when the second well is completed and has received approval from the Idaho Department of Health and Welfare (DEQ) to operate. It is not necessary, prior to conveyance of the second well and second well lot, that a final certification, as described in Section 13, be provided, so long as that final certification is supplied within twelve (12) months of the conveyance. Lexington and TVV agree to provide the City with an owner's policy of title insurance, with extended coverage, in an amount of \$100,000 for each well lot and access easement thereto, from the Stewart Title Company and containing only the printed form exceptions and those exceptions approved by the City. The cost of the title insurance policy shall be paid for by the City.

Lexington and TVV agree to pay the 1991 taxes on all well lots prior to the conveyance of the well lots to the City. The current year's taxes shall be prorated between Lexington and TVV and the City as of the date of conveyance of the well lots.

Lexington and TVV agree to provide the City with executed UCC-4 release forms from each party claiming a security interest in the domestic water system, in the form and manner as required by the City. Such parties to the release shall include, but not be limited to, Washington Federal Savings & Loan for Lexington.

The warranty deeds shall describe by reference to the plat on which they are located or by a metes and bounds description, the well lots, together with all appurtenances including easements for access to the well lots and all improvements thereon and thereto including the pumps and storage facilities, subject to an easement in favor of the Lexington Hills Homeowners' Association for use of the surface for landscaping and open space.

An inventory of the well facilities, pumps, hardware and electrical systems for the domestic water system serving Lexington Hills and Echo Creek Subdivisions and the distribution lines for Lexington Hills Subdivision No. 1, is appended hereto as Exhibit "E". An inventory similar in form shall be furnished to the City with each conveyance. Lexington and TVV agree to convey to the City all hook-up fees, in the amount of \$320/lot, that they have collected, prior to the City accepting the domestic water system, less any amounts paid to Engineering, Management and Maintenance, Inc., for installation of meters at \$120/lot.

3. **Construction of Domestic Water System; Warranties.** Lexington and TVV agree to undertake and complete construction of such additional wells and such storage facilities as may be required by the Idaho Department of Health and Welfare Division of Environmental Quality ("DEQ"), and additional portions of the distribution lines as, when and to the extent they are needed to serve each phase of their respective Projects, and to convey the same upon completion of each phase to the City in accordance with this agreement. The City agrees to allow Lexington and TVV to construct and complete the water system for their Projects in accordance with this agreement, provided that nothing herein shall be construed as prohibiting the City from enforcing any of its Ordinances concerning the future development of the Projects.

As each phase of the domestic water system is conveyed to the City, Lexington or TVV, or both of them, as the developer of that phase, shall warrant to the City in writing that such phase of the domestic water system has been constructed in accordance with the plans and specifications, which in turn shall be warranted to substantially conform with Agreed Construction Standards. The party or parties executing such warranty shall also warrant that phase of the system against defects in construction for a period of one (1) year from execution thereof. The warranties for the first phase of the system are set forth in the warranty agreement attached hereto as Exhibit "F", and similar warranties shall be furnished for each subsequent phase. Each such warranty agreement shall also include an assignment to the City, effective concurrently with expiration of the developer's warranties against defective construction, of all warranties made to the developer by the contractor(s), subcontractor(s) and suppliers for that phase of the system, a copy of which shall be appended thereto.

The City acknowledges and agrees that each such warranty shall be separately enforceable against the party or parties which execute it. The execution of any such warranty by either Lexington or TVV alone shall not create joint and several liability on the part of the nonsignatory for any breach of the warranty given therein by the party executing the same. The City shall hold harmless and indemnify Lexington or TVV, or both, as

assignor, from and against all loss, liability, claims, damages, costs and attorney fees arising out of or in connection with efforts by the City to enforce any of the warranties assigned to it.

All the warranties between the parties are contained in this Agreement and the exhibits incorporated and attached hereto. There are no other warranties, either expressed or implied, between the parties.

4. **Assignment of Water Right.** Concurrently with execution of this agreement, Lexington and TVV shall execute an assignment in the form of Exhibit "G", assigning to the City all of their right, claim and interest in the permit No. 63-11413 ("Permit") issued by the Idaho Department of Water Resources for appropriation of groundwater to supply domestic water service, fire protection and limited irrigation flow for the proposed housing development in the Projects on the terms and conditions set forth therein. A copy of the application for permit is appended hereto as Exhibit "H" and the final permit is appended as Exhibit "I". Lexington and TVV shall take all steps reasonably required to assist the City in securing approval by the Idaho Department of Water Resources for the transfer of Permit No. 63-11413, which approval shall be a condition of closing of this transaction. Upon such approval, the City shall assume the responsibility and cost for compliance with conditions/remarks numbered 1, 2,3,4,7,9,10 of the Permit. The City agrees to provide reasonable assistance to Lexington and TVV in filing any extension or amendment application necessary to extend the Permit period within which water must be applied to beneficial use. Lexington and TVV hereby certify and warrant that they: 1) will provide and maintain a monitoring well sufficient to meet the terms and conditions of condition/remark number 5 as described in the Permit for so long as either party or their heirs or assigns are developing or selling lots in the Projects and 2) have installed the flow measurement devices as further described in the Permit as condition/remark number 8. Lexington and TVV do not feel that the feasibility study as further described in the Permit as condition/remark number 6 is required under the Permit, but they agree to have the feasibility study prepared for the Idaho Department of Water Resources ("IDWR"), should IDWR make demand upon the City for this feasibility study.

Lexington, TVV and the City desire to provide a backup supply of water for fire protection, the flushing of hydrants, as well as for replenishment of the aquifer which is the source of supply for the water system. The City agrees to furnish to the Lexington Hills Homeowners' Association a supply of water to replenish the lakes in the Lexington Hills Subdivision, only according to the following terms and conditions:

- 1) Water is available after all domestic and irrigation needs are satisfied;
- 2) The storage of water is determined by the Idaho Department of Water Resources to be an allowed use under the Permit or the Permit is amended as provided hereinafter, to permit this storage use;

- 3) The charge, until December 31, 1997, for replenishing the lakes in the Lexington Hills Subdivision shall be 50% of domestic water rate, as established by Resolution of the City of Eagle City Council, for the same size of meter. After December 31, 1997, the City shall re-examine the water rate for replenishing the lakes and make such adjustments in the rate as are necessary to fairly reflect and allow the City to recover its proportionate share of the variable costs and the proportionate share of the fixed costs of providing such service; provided that the City expressly agrees that, in determining the proportionate share of the fixed costs associated with providing such service, no allocation shall be made for City overhead that cannot be directly attributed to the operation of the domestic water system. In determining what is the proportionate share of electrical and maintenance expenses, allocation shall be made on a volume basis and in determining what is the proportionate share of insurance, management, and billing expenses, allocation shall be made equally among all system users. For example, as of the date of this Agreement, if the Lexington Hills Homeowners Association was using a 2 inch meter on any pond, the rate to a user would be \$17.78 for the first 3200 cu. ft. of water plus \$0.42/100 cu. ft. for each additional amount of water used and the rate for the Lexington Hills Homeowners Association would be \$8.89 for the first 3200 cu. ft. and \$0.21/100 cu. ft. for each additional amount of water used.
- 4) Lexington and TVV agree to install the meters necessary to measure the flow of water into the lakes at Lexington Hills. In the event that they fail to do so, the City agrees to charge the Lexington Hills Homeowner's Association hook-up fees equal to the costs charged to the City for the purchase and installation of the meters necessary to measure water flow into the Lexington Hills Lakes.
- 5) The City will not furnish water to replenish the lakes during Irrigation Season. The Irrigation Season shall be that period of time, when water is available to the Lexington Hills Subdivision for irrigation use from the Farmers Union Canal Company.

The City shall assist Lexington and TVV in seeking an amendment of the Permit to permit the storage of water as a beneficial use under the Permit, unless Lexington and TVV demonstrate to the City's satisfaction that this amendment to the Permit is not necessary. All costs of obtaining the amendment to the Permit will be borne by Lexington and TVV.

5. **Warranties of Design for Capacity.** Lexington and TVV hereby warrant that the domestic water system to be conveyed to the City has been designed with the capacity to serve the purposes for which the Permit was issued, subject to any restrictions regarding the number of lots to be served as may be determined by DEQ. Upon completion and delivery of the second well and any additional wells as hereinabove described, Lexington and TVV hereby warrant that the domestic water system to be conveyed to the City has

been designed with capacity to serve the purposes for which the Permit was issued and that the Permit issued by the Idaho Department of Water Resources allows for appropriation of an adequate supply of water for the purposes for which it was issued, using usual and customary conservation practices, subject to the terms and conditions of the Permit. Also upon completion of the second well and any additional wells as hereinabove described, Lexington and TVV shall certify to the City, as part of its warranty, that the domestic water system meets the requirements of supply for fire protection in the Projects imposed by the Idaho Department of Health and Welfare.

The City acknowledges that it has received the Report on the Results of 30-Day Pumping of the Well and Analysis of Aquifer prepared on behalf of Lexington and TVV, on the basis of which the Permit appended as Exhibit "I" was issued, that there are no other warranties or promises, express or implied, other than those set forth or specifically referred to herein, and that it is relying solely on that report, together with the warranties elsewhere referred to in this agreement, in making its decision to assume responsibility for maintenance and operation of the system.

6. **Acceptance of Domestic Water System.** Except as otherwise provided herein, the City will accept each phase of the water system upon completion, provided that the City Engineer shall have the right to review and approve the proposed plans and specifications to perform field inspections prior to completion of each phase to confirm that that phase of the System was built in accordance with the Agreed Construction Standards. Completion of each phase will be evidenced by execution and delivery to the City of the warranty deed, title policy, lien releases and the warranties above referenced.

7. **Assumption of Operation and Maintenance.** The City shall assume the operation and maintenance of the domestic water system, subject to the warranties, upon completion of each phase of the domestic water system by Lexington or TVV, or both, as the case may be. The City shall deliver water from the domestic water system to all owners of property entitled thereto in the Projects upon application therefor and payment of fees and charges determined from time to time by the City for domestic water service and fire protection and for irrigation, provided such use for irrigation is limited as provided for in the Permit to appropriate and is subject to availability. This obligation by the City to provide water shall be subject to any restrictions regarding the number of lots to be served as may be determined by DEQ.

8. **City Approvals and Permits.** The City shall promptly apply for and obtain all approvals, licenses and permits required for its ownership, operation and maintenance of the domestic water system, and shall do all things required, if any, to maintain in good standing, or renew, such approvals, licenses and approvals.

9. **Water Quality.** The City shall take all steps required to maintain the quality of water supplied from the domestic water system in compliance with state and federal law. The City shall undertake to do and complete in a timely manner all

monitoring, reporting and other requirements to comply with all public drinking water standards and other federal, state and local laws.

10. **Fees and Charges.** The City shall establish reasonable hookup fees and usage rate charges applicable to users of the domestic water system, which fees and charges may be revised from time to time upon notice to Lexington and TVV at the address provided for herein and as may be subsequently provided to the City, as long as they own property in the Projects, and to owners who have applied and paid for hookup to the system. Such fees and charges shall not exceed the amounts reasonably required for operation and maintenance of the system, together with a reserve for eventual replacement of the system, or portions thereof. The initial fees and rates to be charged are appended hereto as Exhibit "J". All fees and charges collected shall be used on or for the benefit of the domestic water system and shall not become part of the general fund of the City of Eagle.

Lexington and TVV hereby agree to reimburse the City for the costs of operation, including charges of the management of the system and the cost of electricity for operation of the pumps, to the extent of and for so long as the fees and charges collected from users of the system are insufficient to cover the costs of operation.

The City shall commence reimbursement to Lexington and TVV of the amounts paid by Lexington and TVV pursuant to this paragraph, by paying 100% of the difference between: (1) the gross receipts received from service connection charges and monthly service fees and (2) all direct operating expenses, including electrical use charges on all pumps, any costs incurred by the City under its Water Service Contract with Engineering, Management and Maintenance and insurance costs for the domestic water system ("Operating Loss Reimbursement"), provided that nothing contained herein shall require the City to make any operating loss reimbursement payment to Lexington and/or TVV from the general funds of the City or in excess of those amounts paid to the City by Lexington and TVV under this paragraph.

11. **Access to Records.** The City agrees to provide access to the water system records pertaining to the Project, to Lexington and TVV, on the condition that they provide the City with reasonable notice in advance of their inspection, and such inspection shall be only during regular business hours.

12. **Connection to Other Systems.** In the event the City connects the domestic water system to any other water system, there shall be no significant degradation to the quality or quantity of water available to owners in the Projects. In addition, in such event, the warranties herein agreed to be given by Lexington and TVV shall not extend outside the boundaries of the Projects nor to any connection or connections to systems other than the domestic system herein agreed to be conveyed.

13. **Condition Subsequent.** Lexington and TVV agree, within one year after any conveyance is completed, as to of each phase of the domestic water system, to

provide to the City a final certification of compliance of such phase with the Department of Health and Welfare ("DEQ"), State of Idaho requirements, regulations and conditions ("Certificate"). In the event Lexington and TVV fail to provide the necessary Certificates to the City, the City may, at its option, return any phase of the domestic water system where the Certificate has not been obtained to Lexington and TVV ("Return Conveyance"). If Lexington and TVV are diligently working with DEQ to obtain the Certificate and have been unable to do so within one year after the conveyance of any phase, then Lexington and TVV shall be entitled to an additional 180 days to obtain the Certificate, provided they give written notice to the City prior to one year after the conveyance of the phase in question. The Return Conveyance for the well lots shall be by bargain and sale deed and, for those items not conveyed with the real estate, the conveyance shall be by a bill of sale containing only such warranties as are typically contained in a bargain and sale deed.

14. Severability; Entire Agreement; Time of Essence; Attorney Fees. In the event any provision of this agreement is determined by a court of general jurisdiction in this State to be invalid or unenforceable, the remainder of this agreement shall continue in full force and effect as though said provision were never included.

This agreement constitutes the entire agreement between Lexington and TVV, as grantor, and the City of Eagle, as grantee, and there are no other representations, promises or warranties between them other than those expressly stated or provided for herein.

Time is of the essence of this agreement and every provision hereof.

In the event any action is filed to enforce this agreement, or for damages arising out of any default in performance of this agreement or the warranties herein provided for, the prevailing party shall be entitled to recover reasonable attorney fees, and all costs, incurred in connection with such action.

DATED: _____

LEXINGTON HILLS, INC.

By _____
President

Attest:

(SEAL)

Secretary

TREASURE VALLEY VILLAGE

DATED: _____

By _____
William R. Guhrke

DATED: _____

By _____
Martin S. Greene

DATED: _____

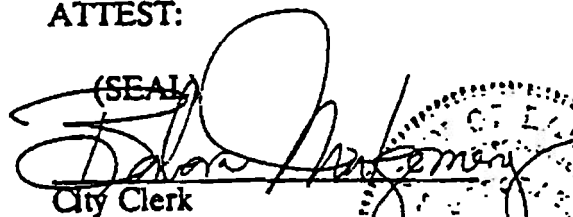
By _____
Lawrence L. Greene

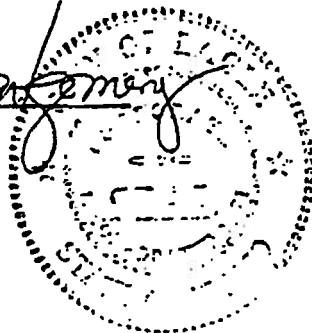
DATED: 5/20/92

CITY OF EAGLE

By 
Mayor

ATTEST:

(SEAL)

City Clerk



DATED: 5-15-92

LEXINGTON HILLS, INC.

By [Signature]
President

Attest:

(SEAL)
[Signature]
Secretary

TREASURE VALLEY VILLAGE

DATED: 5/15/92

By [Signature]
William R. Guhrke

DATED: 5/18/92

By [Signature]
Martin S. Greene

DATED: 5/19/92

By [Signature]
Lawrence L. Greene

("All-Purpose" Acknowledgment)

STEWART TITLE

STATE OF CALIFORNIA

COUNTY OF Los Angeles

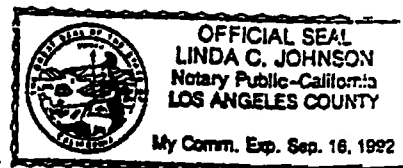


Security of Contract

On May 18, 1992 before me, Linda C. Johnson
(here insert name and title of the officer), personally appeared Martin S. Greene and Lawrence L. Greene
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature [Signature]



(Seal)

**FIRST AMENDMENT TO THE AGREEMENT FOR TRANSFER AND
OPERATION OF DOMESTIC WATER SYSTEM ("AGREEMENT") BETWEEN
LEXINGTON HILLS, INC. ("LEXINGTON"), TREASURE VALLEY
VILLAGE ("TVV") AND THE CITY OF EAGLE ("CITY")
DATED MAY 20, 1992 ("FIRST AMENDMENT")**

The purpose of this First Amendment is to (1) amend the definition of domestic water system to clarify that it refers to the groundwater system and not the irrigation water system; (2) clarify the terms and conditions surrounding the conveyance of the second well and second well lot; (3) revise Section 4 concerning the Assignment of the Water Right (a) to reflect additional requirements concerning the monitoring well; (b) that water in this Section means groundwater; (c) clarify responsibilities of the parties concerning the conditions/remarks of the Water Permit No. 63-11413 ("Permit") issued by the Idaho Department of Water Resources; (d) provide that Lexington and TVV are to change or eliminate two points of diversion under the Permit; (4) add a provision requiring that the Covenants, Conditions and Restrictions for the Lexington Hills Subdivision be amended to provide for maintenance of the lot located at Lot 2 in Block 3 of Lexington Hills Subdivision No. 1, Ada County, Idaho ("Well Lot") and that the City shall not be responsible for homeowner's association dues; (5) provide for a representation and warranty from Lexington and TVV that the water main is located within the easement to the Well Lot; (6) require Lexington and TVV to mark all hydrants which contain irrigation water; (7) revise Schedule A to Exhibit D; and (8) revise Exhibit J.

In consideration of the foregoing, the Agreement is hereby changed to read as follows:

1. In Section 1, the definition of the term "domestic water system" shall be changed to read as follows:

The wells, pumps, distribution lines, and storage facilities as required by the Idaho Department of Health and Welfare (DEQ), the well lots, easements for access to the well lots, the well houses, and any and all easements necessary for the maintenance and operation of the groundwater system constructed and to be constructed to serve the Projects.

2. Section 2, Conveyance of Domestic Water System, shall be amended to read as follows:

2. Conveyance of Domestic Water System. Lexington and TVV agree to convey to the City all of their right, title and interest in and to the domestic water system by a series of warranty deeds in the same or similar form as Exhibit "C" for the real property interest and fixtures and by a bill of sale in the same or similar form as Exhibit "D" for all personal property, free and clear of any and all property taxes, liens and encumbrances, to be executed by the applicable owner or owners of record title thereto as each phase of

construction of the water system is completed and when the second well is completed and has received approval from the Idaho Department of Health and Welfare (DEQ) to operate. Lexington and TVV agree to convey the second well, the second well lot and any easements attendant with the second well lot any time after approval by DEQ, upon demand by the City. The City does not waive its right to accept conveyance of the second well, the second well lot and any necessary easements, by waiting until the second well is contained in an approved and recorded platted subdivision before requiring the conveyance. It is not necessary, prior to conveyance of the second well and second well lot, that a final certification, as described in Section 13, be provided, so long as that final certification is supplied within twelve (12) months of the conveyance. Lexington and TVV agree to provide the City with an owner's policy of title insurance, with extended coverage, in an amount of \$100,000 for each well lot and access easement thereto, from the Stewart Title Company and containing only the printed form exceptions and those exceptions approved by the City. The cost of the title insurance policy shall be paid for by the City.

Lexington and TVV agree to pay the 1991 taxes on all well lots prior to the conveyance of the well lots to the City. The current year's taxes shall be prorated between Lexington and TVV and the City as of the date of conveyance of the well lots.

Lexington and TVV agree to provide the City with executed UCC-3 release forms from each party claiming a security interest in the domestic water system, in the form and manner as required by the City. Such parties to the release shall include, but not be limited to, Washington Federal Savings & Loan for Lexington.

The warranty deeds shall describe by reference to the plat on which they are located or by a metes and bounds description, the well lots, together with all appurtenances including easements for access to the well lots and all improvements thereon and thereto including the pumps and storage facilities, subject to an easement in favor of the Lexington Hills Homeowners' Association for use of the surface for landscaping and open space.

All inventory of the well facilities, pumps, hardware and electrical systems for the domestic water system serving Lexington Hills and Echo Creek Subdivisions and the distribution lines for Lexington Hills Subdivision No. 1, is appended hereto as Exhibit "E". An inventory similar in form shall be furnished to the City with each conveyance. Lexington and TVV agree to convey to the City all hook-up fees, in the amount of \$320/lot, that they have collected, prior to the City accepting the domestic water system, less any amounts paid to Engineering, Management and Maintenance, Inc., for installation of meters at \$120/lot.

3. Section 4 shall be changed to read as follows:

4. **Assignment of Water Right.** Concurrently with execution of this agreement, Lexington and TVV shall execute an assignment in the form of Exhibit "G", assigning to the City all of their right, claim and interest in the permit No. 63-11413 ("Permit") issued by the Idaho Department of Water Resources for appropriation of

groundwater to supply domestic water service, fire protection and limited irrigation flow for the proposed housing development in the Projects on the terms and conditions set forth therein. A copy of the application for permit is appended hereto as Exhibit "H" and the final permit is appended as Exhibit "T". Lexington and TVV shall take all steps reasonably required to assist the City in securing approval by the Idaho Department of Water Resources for the assignment of Permit No. 63-11413, which approval shall be a condition of closing of this transaction. Upon such approval, the City shall assume the responsibility and cost for compliance with conditions/remarks numbered 1, 2,3,4,7,9,10 of the Permit. Lexington and TVV agree to notify the City a reasonable amount of time in advance, and to assist the City in seeking an extension or in filing of an amendment application necessary to extend the Permit period within which groundwater must be applied to a beneficial use. All costs of obtaining any amendment or extension concerning the beneficial use shall be borne by Lexington and TVV. Lexington and TVV hereby certify and warrant that they: (1) will provide and maintain a monitoring well sufficient to meet the terms and conditions of condition/remark number 5 as described in the Permit and they further agree to provide the location of the monitoring well to the City and IDWR, including any subsequent changes in the monitoring well, for so long as either party or their heirs or assigns are developing or selling lots in the Projects and 2) have installed the flow measurement devices as further described in the Permit as condition/remark number 8. Lexington and TVV do not feel that the feasibility study as further described in the Permit as condition/remark number 6 is required under the Permit, but they agree to have the feasibility study prepared for the Idaho Department of Water Resources ("IDWR"), should IDWR make demand upon the City for this feasibility study.

Lexington, TVV and the City desire to provide a backup supply of groundwater for fire protection and the flushing of hydrants, which is the source of supply for the domestic water system. The City agrees to furnish to the Lexington Hills Homeowners' Association a supply of groundwater to replenish the lakes in the Lexington Hills Subdivision, only according to the following terms and conditions:

- 1) Groundwater is available after all domestic and irrigation needs are satisfied;
- 2) The storage of groundwater is determined by the Idaho Department of Water Resources to be an allowed use under the Permit or the Permit is amended as provided hereinafter, to permit this storage use;
- 3) The charge, until December 31, 1997, for replenishing the lakes with groundwater in the Lexington Hills Subdivision shall be 50% of domestic water rate, as established by Resolution of the City of Eagle City Council, for the same size of meter. After December 31, 1997, the City shall re-examine the water rate for replenishing the lakes and make such adjustments in the rate as are necessary to fairly reflect and allow the City to recover its proportionate share of the variable costs and the proportionate share of the fixed costs of providing such service; provided that the City expressly agrees

that, in determining the proportionate share of the fixed costs associated with providing such service, no allocation shall be made for City overhead that cannot be directly attributed to the operation of the domestic water system. In determining what is the proportionate share of electrical and maintenance expenses, allocation shall be made on a volume basis and in determining what is the proportionate share of insurance, management, and billing expenses, allocation shall be made equally among all system users. For example, as of the date of this Agreement, if the Lexington Hills Homeowners Association was using a 2 inch meter on any pond, the rate to a user would be \$17.78 for the first 3200 cu. ft. of water plus \$0.42/100 cu. ft. for each additional amount of water used and the rate for the Lexington Hills Homeowners Association would be \$8.89 for the first 3200 cu. ft. and \$0.21/100 cu. ft. for each additional amount of water used.

- 4) Lexington and TVV agree to install the meters necessary to measure the flow of water into the lakes at Lexington Hills. In the event that they fail to do so, the City agrees to charge the Lexington Hills Homeowner's Association hook-up fees equal to the costs charged to the City for the purchase and installation of the meters necessary to measure groundwater flow into the Lexington Hills Lakes.
- 5) The City will furnish groundwater to replenish the lakes, which ground water will be used for irrigation and storage, only during that portion of the Irrigation Season when surface water is not available from the Farmer's Union Canal Company. The Irrigation Season shall be from March 15 to November 15 of any given year.

The City shall assist Lexington and TVV in seeking an amendment of the Permit to permit the storage of groundwater as a beneficial use under the Permit, unless Lexington and TVV demonstrate to the City's satisfaction that this amendment to the Permit is not necessary. All costs of obtaining the amendment to the Permit shall be borne by Lexington and TVV.

Lexington and TVV, within a reasonable period of time after the execution of this First Amendment, at the City's option, shall seek an amendment of the Permit from IDWR to change or delete two points of diversion from locations not on the Projects to locations within the boundaries of the Projects. All costs of obtaining this amendment to the Permit shall be borne by Lexington and TVV.

4. Section 15 shall be added to the Agreement. Section 15 shall read as follows:

15. Amendments to Lexington Hills Covenants, Conditions and Restrictions. Lexington and TVV agree, within sixty days after the execution of this First Amendment, to amend and record the Covenants, Conditions and Restrictions for the

Lexington Hills Subdivision, in a form approved by the City, to provide that the Lexington Hills Homeowner's Association shall be responsible for the maintenance of the landscaping and improvements of the Well Lot.

5. Section 16 shall be added to the Agreement. Section 16 shall read as follows:

16. Representation and Warranty Concerning Location of Water Main. Lexington and TVV hereby represent and warrant to the City that the groundwater main line from the well located on the Well Lot, which connects to the domestic water system main lines located underneath and beneath the street, Stonybrook Court, in the Lexington Hills Subdivision No. 1, is located within the following area:

A 20 foot wide tract of land being a portion of Lots 1 and 2, Block 3 of Lexington Hills Subdivision (a recorded subdivision on file in Book 59 of Plats, at Pages 5802, 5803, and 5804, Records of Ada County, Idaho) situated in the Southwest 1/4 of the Southwest 1/4 of Section 3, Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho, said tract being 10 feet each side of the following described centerline:

Commencing at a found aluminum cap monumenting the South 1/4 Corner of said Section 3, thence North 89°-44'-43" West, a distance of 2680.44 feet to a found brass cap monumenting the Southwest Corner of said Section 3, thence North 33°-40'-43" East a distance of 526.93 feet to a set steel pin, said pin being the radius point of said Lot 2, said point also being the POINT OF BEGINNING.

Thence North 76°-36'-30" East a distance of 103.96 feet to a point on the westerly right-of-way of Stonybrook Court, said point being the terminus of this description.

6. Section 17 shall be added to the Agreement. Section 17 shall read as follows:

17. Marking of Irrigation Water Systems. Lexington and TVV agree to mark all irrigation water lines or domestic water lines according to DEQ requirements specified in Idaho Regulations for Public Drinking Water Systems, Section 01.08500.03.C, in the Projects, except Lexington Hills Subdivision No. 1. Lexington agrees in Lexington Hills Subdivision No. 1 to permanently mark all valves at the property line which contain pressurized irrigation water.

7. Schedule A to Exhibit D shall be changed to read as follows:

SCHEDULE A

All of the Lexington Hills Subdivision No. 1 according to the Official Plat thereof, filed in Book 59 of Plats at Page 5802, records of Ada County, Idaho.

8. Exhibit J shall be changed to read as follows:

EXHIBIT J**SCHEDULE OF HOOKUP FEES AND SERVICE CHARGES**

Until further notice to the owners of property served by the domestic water system operated by the City of Eagle, the following hookup fees and service charges shall apply to the delivery of water to said property:

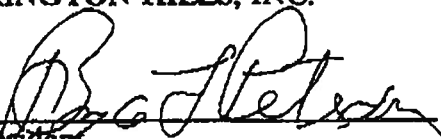
Hookup fees \$320.00

The initial service charges for delivery of domestic water shall be in accordance with the rates established by the City of Eagle in Resolution No. 92-8, dated May 26, 1992, as Exhibit A, Ada County, Idaho, a copy of the current schedule for which is attached hereto.

Both the hookup fee and water service charges may be changed at any time by the City according to the City's ordinances.

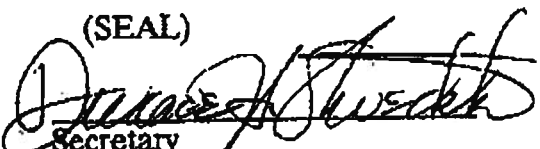
DATED: July 24, 1992

LEXINGTON HILLS, INC.

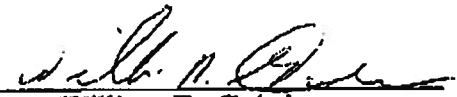
By 
President

Attest:

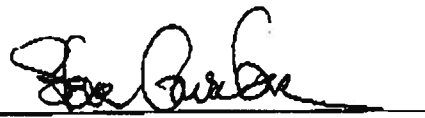
(SEAL)


Secretary

TREASURE VALLEY VILLAGE

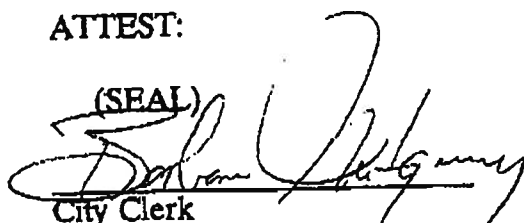
DATED: 7/21/92By 
William R. GuhrkeDATED: 7/16/92By 
Martin S. GreeneDATED: 7/16/92By 
Lawrence S. GreeneDATED: 9/1/92

CITY OF EAGLE

By 
Mayor

ATTEST:

(SEAL)


City Clerk

COOPERATIVE AGREEMENT

This Cooperative Agreement ("Agreement") is made this 14th day of October, 1997, by and among the City of Eagle, an Idaho municipal corporation ("City"); and Lexington Hills Inc., an Idaho corporation ("Lexington"); and Treasure Valley Village ("TVV").

RECITALS

WHEREAS Lexington has constructed a water-line pursuant to a Water Line Agreement dated August 5, 1997 connecting the Floating Feather Well which is owned and operated by United Water of Idaho to the City's domestic water system.

WHEREAS the City finds that the water line is in the collective best interests of the City, Lexington, and TVV as well as in the public's best interest as it connects the City's municipal water system to an additional source of water necessary to serve the current and expected demands on the municipal water system; and

WHEREAS this line has been constructed in a size greater than that necessary to serve solely the Lexington and TVV property and that this line may be used for further expansion of the municipal water system as necessary; and

WHEREAS the City finds the construction of this oversized line will improve the municipal system by providing additional capacity, an adequate sized main line to serve the Lexington and TVV property and anticipated additional property to be included in a municipal system and will provide additional needed back-up water for fire flow protection.

NOW THEREFORE, in consideration of the foregoing recitals which are incorporated below in the terms and conditions contained herein, the parties agree as follows:

1. Lexington and TVV shall contribute the water line to the City of Eagle pursuant to the Water Line Agreement.
2. For the duration of this Cooperative Agreement the City shall include in its municipal water system service territory at least the Lexington, TVV, and McCallum Properties as set forth in the Water Line Agreement, and shall not reduce the same.
3. Pursuant to Eagle City Code Section 6-5-24, the City of Eagle hereby establishes a water construction equivalency fee in the amount of \$530.00, such fee to be used first for the purpose of contributing to the cost of the water line until this agreement terminates. Such water construction equivalency fee shall apply to all new construction for which water service has been

requested from the City of Eagle. Such fee shall be paid to the City of Eagle, on a per lot basis or such other equivalent connection basis as determined by the City for purposes of establishing connection fees, at the time an application for water service is made.

4. Pursuant to Eagle Code Section 6-5-25, Lexington, TVV, and the City of Eagle further agree to the following:

- a. Subject to the limitations contained herein, the City of Eagle shall pay to Lexington and TVV, jointly, the water construction equivalent fees collected by the City pursuant to paragraph 3, above, as reimbursement for the cost of construction of the water line.
- b. This agreement shall be for a duration for no longer than ten (10) years from the date of the completion of the water line. The parties mutually agree that the water line was completed on September 26, 1997.
- c. The City shall reimburse to Lexington and TVV within thirty (30) days after the end of each month by providing one check written jointly to Lexington and TVV and send the same, together with an accounting thereof, to Lexington at 1815 E. Stonybrook Ct., Eagle, Idaho 83616. Such payment shall include reimbursement for those connections received by the City during the prior month.
- d. In no event shall Lexington and TVV be reimbursed an amount greater than \$240,000.00 plus interest at a rate of nine percent (9.0%).
- e. The City waives any administrative fee it may otherwise charge pursuant to this agreement.

5. This reimbursement agreement shall be personal to the parties entering into it and it shall not be assigned without the written consent of the City which consent will not be unreasonably withheld.

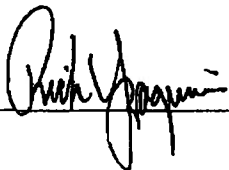
6. This agreement will terminate when Lexington and TVV have been fully reimbursed as set forth in paragraph 4.

7. The City agrees not to deliver or agree to deliver water from its water system to any property or for any use where such delivery or use is likely to result in a water supply insufficient to serve the Lexington, TVV, and McCallum Properties as presently approved for development.

8. This agreement is in addition to and supplements the water line agreement and incorporates the provisions of that agreement herein including such notices, default, and general provisions as set forth in the water line agreement.


City Clerk




Mayor

William R. Guhrke, Treasure Valley
Village

Duane Stueckle, Lexington Hills, Inc.

LEXINGTON HILLS

PARCEL 1

The South 1/2 of the Northeast 1/4, Southeast 1/4 of the Northwest 1/4, the Southwest 1/4, and the Southeast 1/4 of Section 3, in Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho.

EXCEPT all that portion of the Southeast 1/4 of the Northeast 1/4 and the Northeast 1/4 of the Southeast 1/4 of Section 3, Township 4 North, Range 1 East, Boise Meridian lying Easterly of the East line of that certain highway known as the Boise-Horseshoe Bend Highway Survey on file in the office of the Department of Public Works of the State of Idaho.

ALSO EXCEPT that portion of the Southeast 1/4 of the Southeast 1/4 lying East of Horseshoe Bend Highway, Section 3, Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho.

ALSO EXCEPT a parcel of land situate in the East one-half of Section 3, Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho, being more particularly described as follows:

COMMENCING at the Section corner common to Sections 2, 3, 10, 11, Township 4 North, Range 1 East, Boise Meridian; thence

South 89°53'17" West, 2,276.14 feet along the Section line common to said Section 3 and 10 to the REAL POINT OF BEGINNING; thence

North 00°47'30" West, 2,616.95 feet; thence

North 89°53'17" East, 1,511.68 feet along a line parallel to the Southerly boundary of said Section 3 to the Southwesterly right-of-way of Idaho State Highway 55; thence

South 18°06'46" East 2,151.15 feet along the Southwesterly right-of-way of Idaho State Highway 55; thence 580.50 feet along a curve deflecting to the right, with a radius of 1,865.20 feet, a central angle of 17°49'55" a long chord of 578.16 feet and a long chord bearing of South 09°11'49" East, along the Southwesterly right-of-way of Idaho State Highway 55 to the Southerly boundary

Continued on next page

EXHIBIT A

CONTINUATION OF EXHIBIT "A"

of said Section 3; thence
South 89°53'17" West, 2,236.70 feet along the Southerly boundary
of said Section 3 to the REAL POINT OF BEGINNING.

A tract of land situated in the Southwest 1/4 of Section
3, Township 4 North, Range 1 East, Boise Meridian, Ada
County, Idaho described as follows:

Commencing at a found brass cap monumenting the West
1/4 corner of said Section 3, thence along the
Westerly line of the Southwest 1/4 of said Section 3,
South 00 degrees 00'04" West a distance of 2623.34 feet
to a found brass cap monumenting the Southwest corner
of said Section 3, thence leaving said Westerly line and
along the Southerly line of said Southwest 1/4, said line
also being the centerline of Floating Feather Road,
South 89 degrees 44'43" East a distance of 969.34 feet
to a set P.K. Nail, said P.K. Nail being
the POINT OF BEGINNING, thence leaving said
Southerly line,
North 29 degrees 12'40" West a distance of 86.08
feet to a set steel pin, thence
North 00 degrees 15'17" East a distance of 345.05
feet to a set steel pin, thence
South 89 degrees 44'43" East a distance of 454.05 feet
to a set steel pin, thence
South 65 degrees 52'00" East a distance of 476.64 feet
to a set steel pin, thence
South 00 degrees 15'17" West a distance of 300.98 feet
to a set P.K. Nail on the Southerly line of said
Southwest 1/4, thence along said Southerly line
North 89 degrees 44'43" West a distance of 402.58 feet
to the POINT OF BEGINNING.

ALSO EXCEPT - 96.57 ACRE TRACT

A tract of land situated in the West 1/2 of Section 3,
Township 4 North, Range 1 East, Boise Meridian, Ada County
Idaho, described as follows.

Commencing at a found aluminum cap monumenting the South 1/4
corner of said Section 3; thence along the Southerly line
of said Section 3, said line also being the centerline of
Floating Feather Road
North 89 degrees 44'43" West a distance of 2680.44 feet to
a found brass cap monumenting the Southwest corner
of said Section 3, said brass cap also being THE
POINT OF BEGINNING; thence leaving said Southerly
line and along the Westerly line of said Section 3
Continued on next page

CONTINUATION OF EXHIBIT "A"

North 00 degrees 00'04" East a distance of 2623.34 feet
to a found brass cap monumenting the West 1/4 corner
of said Section 3; thence leaving said Westerly line
and along the East-West center-of-section line of
said Section 3
South 89 degrees 43'02" East a distance of 1327.89 feet to
a found steel pin, said pin being the Northeast corner
of the Northwest 1/4 of the Southwest 1/4 of said
Section 3; thence leaving said East-West
center-of-section line
North 73 degrees 57 degrees 00" East a distance of 88.29
feet to a point; thence
South 65 degrees 36'30" East a distance of 487.68 feet to
a point; thence
South 17 degrees 24'00" West a distance of 379.92 feet to a
point; thence
South 16 degrees 30'30" East a distance of 238.22 feet to a
point; thence
South 02 degrees 49'00" East a distance of 87.03 feet to a
point; thence
South 00 degrees 55'30" East a distance of 216.77 feet to
a point; thence
South 00 degrees 29'30" West a distance of 312.54 feet to
a point; thence
South 05 degrees 27'00" East a distance of 379.32 feet to
a point; thence
South 55 degrees 38'30" West a distance of 152.54 feet to
a point; thence
South 37 degrees 32'00" East a distance of 96.00 feet to
a point; thence
South 09 degrees 03'00" East a distance of 136.60 feet to a
point; thence
South 24 degrees 33'00" West a distance of 151.25 feet to a
point; thence
South 56 degrees 49'00" West a distance of 169.87 feet to a
point; thence
North 65 degrees 52'00" West a distance of 168.52 feet to a
point; thence
North 00 degrees 15'17" East a distance of 17.29 feet to a
point; thence
North 89 degrees 44'43" West a distance of 33.27 feet to a
point; thence
North 27 degrees 45'15" West a distance of 324.76 feet to a
point; thence
North 72 degrees 52'00" West a distance of 83.80 feet to a
point; thence
South 67 degrees 00'00" West a distance of 237.15 feet to a
Continued on next page

CONTINUATION OF EXHIBIT "A"

point; thence
North 89 degrees 36'00" West a distance of 157.40 feet to a
point; thence
South 14 degrees 20'00" East a distance of 275.57 feet to a
point; thence
Southeasterly along the arc of a circular curve concave
Southwesterly a distance of 51.74 feet, said curve
having a central angle of 14 degrees 07'04", a radius
of 210.00 feet, a chord bearing South 07 degrees
16'28" East a chord distance of 51.61 feet to a
point; thence
South 00 degrees 12'56" East a distance of 163.36 feet to
a point; thence
Southeasterly along the arc of a circular curve concave
Northeasterly a distance of 19.58 feet, said curve
having a central angle of 14 degrees 01'24", a
radius of 80.00 feet, a chord bearing South 07
degrees 13'39" East a chord distance of 19.53
feet to a point; thence
South 14 degrees 14'21" East a distance of 46.90 feet to
a point; thence
Southeasterly along the arc of a circular curve concave
Southwesterly a distance of 4.90 feet said curve
having a central angle of 14 degrees 01'24", a
radius of 20.00 feet, a chord bearing South
07 degrees 13'39" East a chord distance of 4.88
feet to a point; thence
South 00 degrees 12'56" East a distance of 27.24 feet to
a point; thence
Southeasterly along the arc of a circular curve concave
Northeasterly a distance of 46.88 feet, said curve
having a central angle of 89 degrees 31'46", a
radius of 30.00 feet, a chord bearing South 44
degrees 58'49" East a chord distance of 42.25
feet to a point; thence
South 00 degrees 15'17" West a distance of 30.00 feet to
a point on said Southerly line of Section 3; thence
along said Southerly line
North 89 degrees 44'43" West a distance of 927.00 feet to
THE POINT OF BEGINNING.

PARCEL 3

A Perpetual Non-Exclusive Easement for Access to and
Maintaining and Servicing existing irrigation pumps and
Continued on next page

CONTINUATION OF EXHIBIT "A"

underground lines over the following described parcels.

TRACT I

Government Lot 3 and the Southwest 1/4 Northwest 1/4, Section 3, Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho.

TRACT II

Lots 1 and 2, Block 1, ROCKET BAR SUBDIVISION, according to the Official Plat thereof, filed in Book 26 of Plats at Page 1636, Records of Ada County, Idaho.

Including McCallum property (also known as Ashland Acres, an Eagle City approved preliminary plat)

THE WEST 1/2 NORTHWEST 1/2 SECTION 3, TOWNSHIP 4 NORTH, RANGE 1 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO, EXCEPTING THEREFROM ANY PORTION LYING WITHIN ROCKET BAR SUBDIVISION, ACCORDING TO THE OFFICIAL PLAT THEREOF, FILED IN BOOK 26 OF PLATS AT PAGE 1636, RECORDS OF ADA COUNTY, IDAHO.

EXHIBIT "B"

A parcel of land situate in the East One-half of Section 3, Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho, being more particularly described as follows:

Commencing at the Section Corner common to Sections 2, 3, 10 and 11, Township 4 North, Range 1 East, Boise Meridian; thence S89°53'17"W, 2,276.14 feet along the Section Line common to said Sections 3 and 10 to the REAL POINT OF BEGINNING:

Thence N00°47'30"W, 2,616.95 feet;

Thence N89°53'17"E, 1,511.68 feet along a line parallel to the southerly boundary of said Section 3 to the southwesterly right-of-way of Idaho State Highway 55;

Thence S18°06'44"E, 2,151.15 feet along the southwesterly right-of-way of Idaho State Highway 55;

Thence 580.50 feet along a curve deflecting to the right, with a radius of 1,865.20 feet, a central angle of 17°49'55", a long chord of 578.16 feet and a long chord bearing of S09°11'49"E, along the southwesterly right-of-way of Idaho State Highway 55 to the southerly boundary of said Section 3;

Thence 89°53'17"W, 2,236.70 feet along the southerly boundary of said Section 3 to the REAL POINT OF BEGINNING.

Comprising 115.0 Acres, more or less.

EXHIBIT B

EXHIBIT D

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That Lexington Hills, Inc., an Idaho corporation, and Treasure Valley Village, a California limited partnership (collectively "the Seller"), for and in consideration of the sum of Ten Dollars (\$10) and other good and valuable consideration paid to Seller by the City of Eagle, an Idaho municipal corporation ("Buyer"), the receipt and adequacy of which are hereby acknowledged, hereby sells, and delivers unto Buyer all of the wells, pumps, distribution lines, storage facilities and other tangible personal property owned by Seller and now existing or hereafter placed upon the real property described on Schedule A attached hereto and incorporated herein by this reference (the "Property") for all purposes, or installed in any improvement situated upon the Property, and used as a part of or in connection with the operation of the Property (said wells, pumps, distribution lines, storage facilities and tangible personal property being herein collectively referred to as the "Personal Property"), such Personal Property to include, but not be limited to, those items described in Schedule B attached hereto and incorporated herein by this reference.

TO HAVE AND TO HOLD all the Personal Property unto Buyer, its successors and assigns, forever. Seller hereby represents, covenants and warrants to Buyer that Seller is the lawful owner of the Personal Property; that the Personal Property is free from all encumbrances; that Seller has a right to sell the Personal Property as aforesaid; that Seller hereby agrees to warrant and defend title to the Personal Property unto Buyer, its successors and assigns, against the lawful claims and demands of all persons.

DATED as of this 15TH day of May, 1993

LEXINGTON HILLS, INC.

By [Signature]
President

Attest:

(SEAL)

[Signature]
Secretary

TREASURE VALLEY VILLAGE

DATED: 5/15/92

By William R. Guhrke
William R. Guhrke

DATED: 5/18/92

By Martin S. Greene
Martin S. Greene

DATED: 5/18/92

By Lawrence L. Greene
Lawrence L. Greene

ATTACHMENTS:

Schedule A - Legal Description to First Well Lot

Schedule B - Inventory (same as Exhibit E to the Agreement)



DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mall, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL B. ANI
GOVERNOR

B. KEITH WIGG
DIRECTOR

September 12, 1991

FLOATING FEATHER HILLS INC. &
TREASURE VALLEY VILLAGE
2417 BANK DRIVE, SUITE 101
BOISE ID 83705

Dear Permit Holders:

Re: In the Matter of Application for Permit No. 63-11413

Enclosed is a copy of the approved Application Permit No. 63-11413 along with a copy of the Final Order Adopting Proposed Memorandum Decision and Order.

Any person who does not agree with the decision of the department may request a rehearing before the Director within 20 days, or may appeal directly to the district court within 30 days of the date the decision is mailed.

If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

L. GLEN SAXTON, Chief
Water Allocation Bureau

Enclosures

c w/enc, final order &
cert. of mailing:
See cert. of mailing

EXHIBIT C

State of Idaho
Department of Water Resources
Permit To Appropriate Water

NO. 63-11413

Proposed Priority: March 14, 1991
This is to certify, that

TREASURE VALLEY VILLAGE
FLOATING FEATHER HILLS INC
LIMITED PARTNERSHIP
4720 EMERALD
BOISE ID 83706

Maximum Diversion Rate:

3.25

has applied for a permit to appropriate water from: **GROUNDWATER**
and a permit is **APPROVED** for development of water as follows:

BENEFICIAL USE

IRRIGATION
DOMESTIC
FIRE PROTECTION

PERIOD OF USE

03/15 to 11/15
01/01 to 12/31
01/01 to 12/31

RATE OF DIVERSION

2.00 CFS
1.25 CFS
2.00 CFS

Totals

3.25 CFS

LOCATION OF POINT(S) OF DIVERSION:

NESE Sec. 4, Township 04N, Range C
SWSW Sec. 3, Township 04N, Range C
SWSW Sec. 4, Township 04N, Range C
NWSW Sec. 3, Township 04N, Range C
ADA County

PLACE OF USE: IRRIGATION
TWN RGE SEC

04N 01E 3

LOT 2 (NWNE) 3
LOT 3 (NENW) 3
NWSW 19
NESE 5
SESE 20

ACRES

ACRES

SENE 29
SENE 19
SWSW 19
NWE 17

ACRES

SENE 6
NENW 19
SESW 19
SWSE 22

TOTAL

Total number of acres irrigated:

200

200

PLACE OF USE: DOMESTIC, same as IRRIGATION use

PLACE OF USE: FIRE PROTECTION, same as IRRIGATION use

CONDITIONS/REMARKS:

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before September 1, 1995.
2. Subject to all prior water rights.
3. The issuance of this permit in no way grants any right-of-way or easement across the land of another.
4. The rate of diversion of water for irrigation under this permit and all other water rights on the same land shall not exceed 0.02 cubic feet per second for each acre of land.

Permit To Appropriate Water

NO. 63-11413

CONDITIONS/REMARKS:

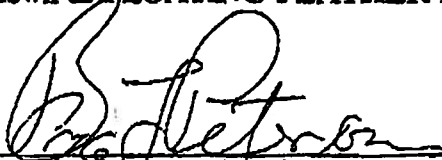
5. The water right holders shall provide a well acceptable to the Department for use as a monitoring well and are responsible on an on-going basis to provide a well suitable for monitoring as determined by the Department.
6. In order to conserve limited supplies in the ground water aquifer, water diverted under this right for irrigation may be diverted only during the irrigation season of March 15 through November 15. The water right holders are required to prepare feasibility studies to determine the extent to which surface water can be utilized for irrigation on both the Floating Feather Hills Project and the Trail Creek Ranch Project and to submit the studies to the Department for review and approval. As a minimum, Farmers Union Canal Company water shall be utilized for the irrigation of parcels equal to or greater than one-half acre in size during periods when water is being delivered in the canal. This water right may be used for irrigation purposes only if the entire amount of water from the Farmers Union Canal Company remains with the lands described in the application. Sale or transfer of surface water from any portion of the property will void the Department's approval to use the right for irrigation purposes.
7. The permit holder is responsible to insure that pumpage under this water right does not directly cause the water level to significantly decline in any domestic well drilled and in use prior to March 29, 1978, or to cause the water level in any other well having a prior right to exceed a reasonable pumping level, unless the permit holder provides reasonable compensation or mitigation to the prior water right holder for the reduced water levels as determined by the Director.
8. The permit holder shall permanently install and maintain totalizing flow measurement devices of a type approved by the Department as a part of each diverting works. These devices shall be maintained by the water right holders and shall be made available to inspection by Department personnel for the purpose of long-range study and monitoring of the ground water aquifer. The water right holder shall provide flow measurements to the Department on a frequency determined by the Department.
9. Each lot which receives water under this water right shall be metered, and the cost to the user allocated based on the amount of water used.
10. Domestic use is for 900 homes.

RECEIVED
SEP 2 1992

Department of Water Resources

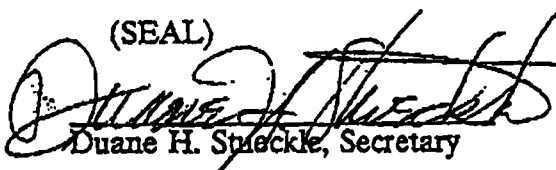
ASSIGNMENT OF WATER PERMIT NO. 63-11413

LEXINGTON HILLS, INC., an Idaho corporation, and TREASURE VALLEY VILLAGE, a California limited partnership, the "Assignors", hereby assign, transfer and set over unto the CITY OF EAGLE, a municipal corporation, the "Assignee", all of their right, title and interest in and to that certain permit to appropriate groundwater, Permit No. 63-11413, issued by the Idaho Department of Water Resources, subject to the terms and conditions of the Agreement for Transfer and Operation of Domestic Water System dated May 20, 1992, between Assignors and Assignee.

Dated: July 24, 1992LEXINGTON HILLS, INC. (formerly
known as FLOATING FEATHER HILLS, INC.)
Bryce L. Peterson, President

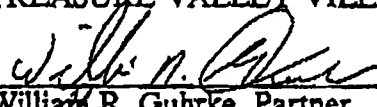
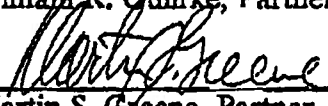
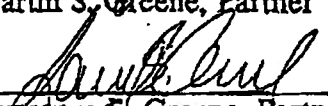
Attest:

(SEAL)


Duane H. Stueckle, Secretary

Dated: _____, 1992

TREASURE VALLEY VILLAGE


William R. Guhrke, Partner
Martin S. Greene, Partner
Lawrence S. Greene, Partner

MICROFILMED

MAY 21 1993

STATE OF IDAHO)

: ss.

County of Ada)

On this 24th day of July, 1992, before me, the undersigned, a Notary Public in and for said State, personally appeared Bryce Peterson and Duane H. Stueckle, known or identified to me to be the President and Secretary, respectively, of the corporation, who executed the instrument on behalf of said corporation, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate first above written.



Georgia Mackley
Notary Public for Idaho
Residing at: Bowen Rd
My Commission expires: 6/20/94

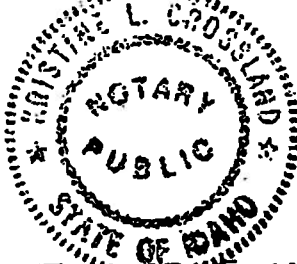
STATE OF Idaho)

: ss.

County of Ada)

On this 21st day of July, 1992, before me, the undersigned, a Notary Public in and for said State, personally appeared William R. Guhrke, known or identified to me to be a Partner of the Treasure Valley Village, a California limited partnership, who executed the instrument on behalf of said limited partnership, and acknowledged to me that such limited partnership executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate first above written.



Kristine L. Crossland
Notary Public for Idaho
Residing at: Bowen
My Commission expires: 2/9/93

STATE OF California)

: ss.

County of (Los Angeles))

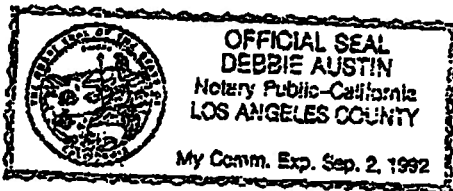
On this 16th day of June, 1992, before me, the undersigned, a Notary Public in and for said State, personally appeared Martin S. Greene, known or identified to me to

RECEIVED

MAY 21 1993

be a Partner of the Treasure Valley Village, a California limited partnership, who executed the instrument on behalf of said limited partnership, and acknowledged to me that such limited partnership executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate first above written.

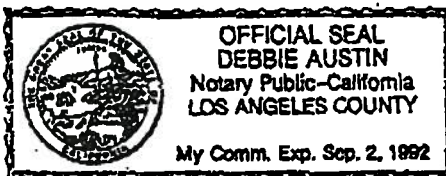


Debbie Austin
Notary Public for California
Residing at: Encino
My Commission expires: Sep. 2, 1992

STATE OF California
: ss.
County of Los Angeles

On this 16th day of June, 1992, before me, the undersigned, a Notary Public in and for said State, personally appeared Lawrence E. Greene, known or identified to me to be a Partner of the Treasure Valley Village, a California limited partnership, who executed the instrument on behalf of said limited partnership, and acknowledged to me that such limited partnership executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate first above written.



Debbie Austin
Notary Public for California
Residing at: Encino
My Commission expires: Sep. 2, 1992

1-24-94

State of Idaho
Department of Water Resources

Permit To Appropriate Water

NO. 63-12017

Proposed Priority: April 21, 1993

Maximum Diversion Rate:

1.56 CFS

This is to certify, that LEXINGTON HILLS INC

TREASURE VALLEY VILLAGE LTD PARTNERSHIP

1815 E STONEYBROOK CT

EAGLE ID 83616

has applied for a permit to appropriate water from: GROUNDWATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
WILDLIFE	01/01 to 12/31	1.56 CFS	
WILDLIFE STORAGE	01/01 to 12/31		15.0 AF
RECREATION	01/01 to 12/31	1.56 CFS	
RECREATION STORAGE	01/01 to 12/31		15.0 AF
AESTHETIC	01/01 to 12/31	1.56 CFS	
AESTHETIC STORAGE	01/01 to 12/31		15.0 AF
DIVERSION TO STORAGE	01/01 to 12/31	1.56 CFS	
Totals		1.56 CFS	

LOCATION OF POINT(S) OF DIVERSION:

NWSW , Sec. 3, Township 04N, Range 01E
SWSWSW , Sec. 3, Township 04N, Range 01E
SWSW , Sec. 4, Township 04N, Range 01E
NESE , Sec. 4, Township 04N, Range 01E
ADA County

PLACE OF USE: WILDLIFE

TWN RGE SEC

04N 01E 3

SWNE

SWSW

SESE

NESW

SESW

NWSW

NWSE

PLACE OF USE: RECREATION, same as WILDLIFE use

PLACE OF USE: AESTHETIC, same as WILDLIFE use

CONDITIONS/REMARKS:

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before January 1, 1999.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
4. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.

EXHIBIT D

FEB 24 1994

DAVIS WRIGHT TREMAINE

LAW OFFICES

702 WEST IDAHO STREET - SUITE 700 - BOISE, IDAHO 83702
(208) 338-8200

L. W. GRANT, III
(208) 338-8245

September 9, 1992

Ms. Barbara Montgomery
City Clerk-Treasurer
City of Eagle
P. O. Box 477
Eagle, ID 83616

Re: Original Deed - Lexington Hills Well Lot

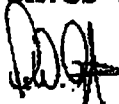
Dear Barbara:

Enclosed is the original deed for the Lexington Hills well lot marked as recorded by the Ada County Recorder's office. Please store this document with your other important papers in your safe deposit box.

We will forward a transcript of the transaction as soon as we receive the final title insurance policy.

Sincerely,

DAVIS WRIGHT TREMAINE



L. W. Grant, III

LWG:kd
Enclosure

V851674wrtwryslmontgum.3
September 9, 1992

FAX: (208) 338-8299

ANCHORAGE, ALASKA • BELLEVUE, WASHINGTON • HONOLULU, HAWAII • LOS ANGELES, CALIFORNIA
PORTLAND, OREGON • RICHLAND, WASHINGTON • SAN FRANCISCO, CALIFORNIA • SEATTLE, WASHINGTON • WASHINGTON, D.C.

received
9-10-92

9259114

STEWART TITLE
ADA COUNTY, ID. FOR
DAVID NAVARRO
RECORDED BY *K. Law*
WARRANTY DEED

'82 SEP 1 PM 4 55

FOR VALUE RECEIVED

Lexington Hills, Inc., an Idaho corporation,

GRANTOR, does hereby GRANT, CONVEY and WARRANT unto

the City of Eagle, an Idaho municipal corporation,

GRANTEE, whose current address is: City Hall, P. O. Box 477, Eagle, Idaho 83616, the following described real property in Ada County, State of Idaho, more particularly described as follows, to wit:

Lot 2 in Block 3 of Lexington Hills Subdivision No. 1, according to the official Plat thereof, filed in Book 59 of Plats at Page 5802, records of Ada County, Idaho, together with an easement for installation and maintenance of an underground water line over and across the following described property:

A 20 foot wide tract of land being a portion of Lots 1 and 2, Block 3 of Lexington Hills Subdivision (a recorded subdivision on file in Book 59 of Plats, at Pages 5802, 5803, and 5804, Records of Ada County, Idaho) situated in the Southwest 1/4 of the Southwest 1/4 of Section 3, Township 4 North, Range 1 East, Boise Meridian, Ada County, Idaho, said tract being 10 feet each side of the following described centerline:

Commencing at a found aluminum cap monumenting the South 1/4 Corner of said Section 3, thence North 89°-44'-43" West, a distance of 2680.44 feet to a found brass cap monumenting the Southwest Corner of said Section 3, thence North 33°-40'-43" East a distance of 526.93 feet to a set steel pin, said pin being the radius point of said Lot 2, said point also being the POINT OF BEGINNING.

Thence North 76°-36'-30" East a distance of 103.96 feet to a point on the westerly right-of-way of Stonybrook Court, said point being the terminus of this description.

The above described easement contains .05 acres, more or less, subject to all existing easements and rights-of-way.

SUBJECT TO the Declaration of Covenants, Conditions and Restrictions for Lexington Hills, recorded February 20, 1992, as Instrument No. 9209714, records of Ada County, Idaho;

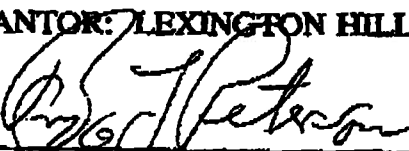
SUBJECT TO a non-exclusive perpetual easement on and over the surface for the use and enjoyment of the record owners of the Lexington Hills Subdivision as a park and open space subject to the requirements for well lots set forth in IDAPA 16.01.8601 or any subsequent regulations or statutes promulgated by the State of Idaho or the United States; and

SUBJECT TO other easements, covenants and encumbrances of record, and to real property taxes and assessments, for the year 1992.

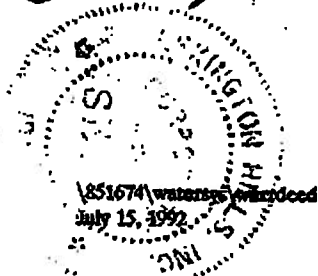
TO HAVE AND TO HOLD the said premises, with their improvements and appurtenances unto the said Grantee, and Grantee's heirs and assigns forever. And the said Grantor, for itself, its heirs and assigns, does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that except as set forth above, the said premises are free from all encumbrances; the quiet and peaceable possession of said premises by the Grantee, its heirs and assigns; and that Grantor will warrant and defend the same from all lawful claims whatsoever.

GRANTOR: LEXINGTON HILLS, INC.

By:



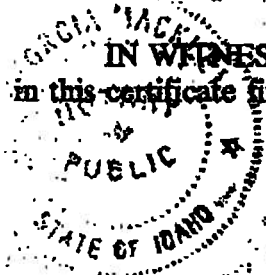
Bryce L. Peterson
Its President



STATE OF IDAHO)
 : ss.
 County of Ada)

On this 30th day of July, 1992, before me, the undersigned, a notary public in and for said State, personally appeared BRYCE L. PETERSON and DUANE H. STUECKLE, known or identified to me to be the President and Secretary, respectively, of the corporation that executed the instrument on behalf of said corporation, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate first above written.



Leonia Mackley
 Notary Public for Idaho
 Residing at: *Boise, Id*
 My commission expires: *6/20/94*

City of Eagle Water System – Mission Statement

The City of Eagle Shall provide for and maintain a water supply and delivery system within its service area to meet the health and safety needs of the City as anticipated by the land uses identified in the Comprehensive Plan.

Water System Goals of the City of Eagle.

- Acquire adequate groundwater rights for municipal needs for the planning area.
- Construct a full service distribution system for potable and fire protection needs of residents and businesses as anticipated by the latest Comprehensive Plan.
- Secure redundant system components at startup.
- Design for cost-effective long-term efficiency.
- Maintain a water system protective of the health and safety of the public.
- Protect groundwater quality in lower aquifer by reducing risk imposed by multiple, small points of diversion.
- Design for a cost-efficient control and maintenance of the groundwater wells.
- Protect property values through compatible design and landscaping of visible infrastructure.
- Negotiate agreements with adjacent water purveyors to provide for mutual aide in the event of catastrophic system failure caused by third party attack of system components.

Specific Needs anticipated by City of Eagle based on Comprehensive Plan

- Four wells each with standby power capable of supplying a minimum of 1,000 gallons per minute.
- One water storage tank of 700,000 gallon capacity on the east side of the system capable of supplying water by gravity.
- One water storage tank of 1,500,000 gallon capacity on the north side of the system capable of supplying water by gravity.
- A loop water system network for major trunk lines for safety and maintenance.
- Sub-system network for secondary supply to individual developments.
- A Public Works Water Department of licensed water system operators and qualified staff.

**BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO**

IN THE MATTER OF APPLICATION FOR)
AMENDMENT OF PERMIT NO. 63-12448)
IN THE NAME OF THE CITY OF EAGLE)
_____)

FINAL ORDER

This matter is before the Director of the Department of Water Resources ("Director" or "Department" or "IDWR") as the result of an application to amend water right permit no. 63-12448 filed by the City of Eagle ("Eagle" or "Applicant"). The application seeks to add two new points of diversion from ground water to the permit.

STANDARD FOR DECISION

Applications to amend existing permits are considered pursuant to Idaho Code § 42-211. Idaho Code § 42-211 provides in part:

Whenever a permit has been issued pursuant to the provisions of this act, and the permit holder desires to change the place, period, or nature of the intended use, or make other substantial changes in the method of diversion or proposed use or uses of the water, he shall file an application for amendment upon forms furnished by the department of water resources together with the statutory fee for filing and recording the same, and upon receipt thereof it shall be the duty of the department of water resources to examine same and if approval thereof would not result in the diversion and use of more water than originally permitted and if the rights of others will not be adversely affected thereby, the director of the department of water resources shall approve said application and return an approved copy to the permit holder. The director of the department of water resources shall give such notice to other affected water users as he deems appropriate and may grant the amendment, in whole or in part or upon conditions, or may deny the same. Notice of partial approval or conditions or denial of an amendment shall be forwarded to the applicant by certified mail and shall be subject to judicial review as hereafter provided. The priority of the right established pursuant to a permit which has been amended under these provisions shall date from the date of the original application for permit, provided the permit holder has complied with other provisions of this act.

An applicant bears the burden of proof for the factors the Department must consider under Idaho Code § 42-211. The Director should also determine whether an amendment of a water right permit is in the local public interest. *Hardy v. Higginson*, 123 Idaho 485, 849 P.2d 946 (1993).

The Director, having examined the application and the written record and having reviewed the testimony of the parties, makes the following findings of fact and conclusions of law.

COURSE OF PROCEEDINGS

On June 8, 2001, Eagle filed an application to amend existing water right permit no. 63-12448 to add two additional points of diversion (the "Application"). The proposed points of diversion are located in Eagle, Idaho, in the SWSW, Section 4, T4N, R1E¹ (Eagle well no. 3, aka Brookwood well) and NESE, Section 4, T4N, R1E (Eagle well no. 4). Notice of the application was published in The Idaho Statesman of Boise, Idaho, on or about June 21 and 28, 2001. Eagle Water Company, Inc., Weldon T. Fisher, Eleanor I. Chase, and a group of concerned citizens² protested the Application.

The Department held a prehearing conference for the application and protests on August 15, 2001. Following several attempts to schedule a second prehearing conference, the Department issued a *Notice Canceling Prehearing Conference and Interrupting Processing* on November 29, 2001, which interrupted the proceedings for six months to allow the parties to attempt negotiation of a settlement in this matter.

In January 2002, protestant Eleanor I. Chase died. On July 11, 2002, the Estate of Eleanor I. Chase (the "Chase Estate" or "Chase" or "Estate") was allowed to intervene as a full party on the grounds stated in Ms. Chase's protest.

The Department held a second prehearing conference on September 18, 2002. A *Prehearing Order* issued following the conference (1) gave the parties until November 1, 2002, to negotiate a settlement of the protests, (2) tentatively scheduled a hearing for February 26, 2003, and (3) authorized informal discovery. A *Notice of Hearing* issued on January 10, 2003, scheduled a hearing for February 26, 2003. That hearing was vacated and formal discovery was authorized on February 4, 2003, in the *Order Granting Petition for Reconsideration and Authorizing Discovery*.

The Director appointed Peter Anderson as Hearing Officer in this matter on June 5, 2003.

The Department conducted a third prehearing conference on August 1, 2003. After this conference, a *Scheduling Order* issued on August 20, 2003, established time periods for completion of discovery, provided for the exchange of witness and exhibit lists, and set tentative hearing dates for November 13 and 14, 2003.

On September 30, 2003, the Department notified Eagle that proof of beneficial use or a request for extension of time to file proof of beneficial use was due on or before December 1,

¹ Public land survey descriptions in this decision without a fraction following a two alpha character descriptor are followed by the fraction "1/4." In addition, all public land survey descriptions are based on the Boise Meridian. All locations are in Ada County.

² James Burton identified himself as the spokesperson for a number of concerned citizens living on Eagle Road who signed the protest. Letter received August 13, 2001, at the Department's Western Region Office. Many of the signatures on the protest forms were illegible. Only one protest fee of \$25 was received from Darrell E. Davis with this protest. Using the forms and other submissions in the record, the concerned citizens included Darrell Davis, James Burton, Stan Stevens, Stanton Niccolls, Melissa Sadlek, Jason Stinar, William Miller, Chris Brooke, Sheri Kinzer, Steve Capellar, Shelby Conrad, Michael Kilfoyle, Laren Walker, and Gary Heikes.

2003. Eagle requested an extension of time to file proof of beneficial use on the basis that the contested application for amendment had been pending since 2001, and the contested case had not been heard or resolved. In response to the request, the Department sent a letter to Eagle on January 14, 2004, acknowledging timely receipt of the request for extension of time to file proof of beneficial use and stating:

Because of the pending contested case, and the effect it may have on the water right permit, IDWR will hold the request for extension of time without action until the contested case is resolved. The request has been timely filed and satisfies the requirements of the law related to filing proof of beneficial use or a request for extension of time.

Pursuant to a formal *Notice of Hearing*, a two-day hearing was held at the Department's state office in Boise, Idaho, on November 13 and 14, 2003. Eagle was represented by Bruce M. Smith and Tammy A. Zokan, the Chase Estate was represented by Matt Howard, and Eagle Water Company was represented by Molly O'Leary. James Burton, from the group filing a joint protest, attended the hearing on November 13, 2003, and Shelby Conrad attended the hearing on November 14, 2003. Weldon Fisher did not appear at the hearing.

At the conclusion of the hearing, the parties were given until December 15, 2003, to file written closing statements. Eagle, the Chase Estate, Eagle Water Company, and James Burton filed written statements. This matter was fully submitted to the Department on December 15, 2003.

Following issuance of the Hearing Officer's *Recommended Decision and Order* on March 8, 2004, Eagle filed a *Petition for Reconsideration of Recommended Decision and Order*. A hearing on the *Petition* was held on April 8, 2004. Following the hearing, the *Petition for Reconsideration of Recommended Decision and Order* was granted. Parties were allowed until April 21, 2004, to file briefs on any of the issues raised in the *Petition* or discussed at the hearing. Eagle and James Burton submitted comments.

On April 30, 2004, the Hearing Officer issued a *Recommended Decision and Order Following Reconsideration* approving the application with conditions. The City of Eagle and the Chase Estate filed exceptions to the recommended order of April 30, 2004.

STATEMENT OF ISSUES RAISED BY EXCEPTIONS

City of Eagle Exceptions

The exceptions filed by Eagle raised the following issues about the Hearing Officer's recommended order:

- (1) Eagle should not be required to cease diversion upon an allegation that a ground water right holder is not able to pump the full quantity of water to which the water right holder is entitled;

- (2) The priority date of permit no. 63-12448 should not be advanced to June 8, 2001;
- (3) The proposed point of diversion referred to as Eagle well no. 4 should have been approved as a point of diversion;
- (4) Eagle should not be required to fully compensate for the inability of the Chase Estate to divert its paper water rights;
- (5) Eagle should not be required to (a) conduct a pump test for proposed Eagle well no. 3, (b) determine a maximum flow rate for Eagle well no. 3, (c) negotiate with the Chase Estate for injury caused by pumping of the maximum flow rate, and if the negotiations are not productive, (d) file a lawsuit for judicial determination of the compensation required; and
- (6) The evidence does not support a finding in the recommended order that a new well cannot be drilled at or near Eagle well no. 2.

Chase Estate Exceptions

The exceptions filed by the Chase Estate raised the following issues about the Hearing Officer's recommended order:

- (1) The recommended order did not identify all the Chase water rights protected to historical ground water pumping levels;
- (2) Projected drawdowns in the Chase dairy well, small irrigation well, and large irrigation well are not consistent with the evidence and expert opinions;
- (3) A finding that the dairy well will only produce 0.067 cfs is not supported by the evidence;
- (4) Supplemental water right no. 63-05229 should be afforded the same protection as other water rights;
- (5) The recommended order incorrectly determined that the large irrigation well would not be adversely impacted;
- (6) The amendment does not satisfy the local public interest standard; and
- (7) The application for amendment should have been denied rather than forcing additional iterations of negotiations and litigation in court and perhaps before the Department.

EVIDENCE CONSIDERED

Exhibits offered by Eagle and admitted by stipulation of the protestants as part of the record are as follows:

- Exhibit 1: Application for Amendment of Permit No. 63-12448 filed by the City of Eagle
- Exhibit 2: Brookwood Public Water Supply Well Design/Proposal Plans and Specifications dated May 2000
- Exhibit 3: Map of Eagle Water System
- Exhibit 4: Map of Protestants & Eagle Wells
- Exhibit 5: Chart of Eagle Water System changes
- Exhibit 6: Resume of Terry Scanlan, P.E., P.G.
- Exhibit 7: Municipal Production Bar Graph
- Exhibit 8: United Water Idaho Floating Feather & Redwood Creek Monthly Well Production
- Exhibit 9: Eagle Water Company Annual Well Production
- Exhibit 10: Eagle Annual Well Production
- Exhibit 11: Water Level Monitoring of Vail and Miller Wells, October 22, 1999
- Exhibit 12: June 2, 2003 and June 3, 2003 letters regarding monitoring results for Vail and Miller Wells
- Exhibit 13: September 26, 2003 letter regarding water level monitoring results for Vail and Miller Wells
- Exhibit 14: June 3, 2003 letter regarding Burton Group Well Measurements
- Exhibit 15: Photo log and photographs of May 13, 2003 site inspection of Chase Dairy site
- Exhibit 16: Agreement to Provide Supplemental Fire Flows
- Exhibit 17: Water Line Agreement
- Exhibit 18: December 2, 1997 Agreement

Exhibit 19: Water Service Contract and First Amendment to Water Service Contract

Exhibit 20: Water Right Claim No. 63-5227

Exhibit 21: Water Right Claim No. 63-5229.

Exhibit 22: Approved Application for Permit No. 63-8663.

Eagle also joined with the Chase Estate in offering Exhibits 102, 103, 104, 105 and 106, which are described in the Findings of Fact.

Exhibits offered by Eagle and admitted in rebuttal to the Protestants' case and part of the record are as follows:

Exhibit 23: Chase Dairy Well Pump Evaluation, 11/13/03

Exhibit 24: Chase Small Irrigation Well Suction Lift Evaluation, 11/13/03

Exhibit 25: (Not admitted).

Exhibits offered by the Chase Estate and admitted as part of the record are as follows:³

Exhibit 101: Summary of Ground Water Conditions in the Vicinity of Proposed Brookwood Subdivision Well Site, August 15, 2001

Exhibit 102: Revised Summary of Ground Water Conditions in the Vicinity of Proposed Brookwood Subdivision Well Site, August 17, 2001

Exhibit 103: IDWR Open-File Report, Ground-Water Conditions in the Dry Creek Area, June 1991

Exhibit 104: Results of the 30-Day Pumping Test and Aquifer Analysis, June 1991

Exhibit 105: Aquifer Test at Floating Feather Well, August 9, 1995

Exhibit 106: Municipally-Owned Water System Master Plan and Budget Study, April 12, 2002 and rev. May 21, 2003

Exhibit 107: Deposition of the City of Eagle, September 10, 2003

Exhibit 108: Well specifications and reports from Layne of Idaho, Inc.

Exhibit 109: Eagle's Response to the Estate's Third Set of Interrogatories, etc.

³ Exhibits 101-112 and 120-123 were admitted by stipulation of the City of Eagle.

Exhibit 110: Eagle's Fifth Supplemental Response to Estate's Interrogatories, etc.

Exhibit 111: Eagle's Sixth Supplemental Response to Estate's Interrogatories, etc.

Exhibit 112: Eagle's Verification of Signatures on Discovery Responses

Exhibit 113: Amendment to Application of Eagle United Water before IPUC, September 1, 1994

Exhibit 114: Testimony of Morgan Masner before IPUC, December 1, 1995

Exhibit 115: IPUC Order No. 26337, March 5, 1996

Exhibit 116: IPUC Order No. 26524, July 19, 1996

Exhibit 117: Application of United Water Idaho, July 11, 1997

Exhibit 118: Comments of IPUC Staff, August 20, 1997

Exhibit 119: IPUC Order No. 27121, September 8, 1997

Exhibit 120: Protest by Eleanor I. Chase to Application No. 63-11413, November 29, 1990

Exhibit 121: Notes of D. Tuthill re Application No. 63-11413

Exhibit 122: Proposed Memorandum Decision and Order Approving Application for Permit No. 63-11413

Exhibit 123: Portions of Eagle's Response to Eagle Water Company, Inc.'s First Set of Interrogatories, etc.

Exhibit 124: Letter from Eagle to David Tuthill, May 24, 1995

Exhibit 125: Letter from Chris Meyer to Jim Johnson, November 19, 1998

Exhibit 126: Proof of Beneficial Use for Permit No. 63-12017

Exhibit 127: Proof of Beneficial Use for Permit No. 63-11413

Exhibit 128: Amendment of Permit No. 63-12448, April 7, 2000

Exhibit 129: Application for Amendment of Permit 63-12448, December 2, 1998

Exhibit 130: Application for Permit 63-12448, April 7, 1998

Exhibit 131: Letter from Chris Meyer to Jeff Peppersack, March 31, 2000

Exhibit 132: Letter from Eleanor I. Chase to Gary Spackman, August 14, 1999

Exhibit 133: Letter from J. Evan Robertson to Gary Spackman, November 25, 1998

Exhibit 134: Letter from Eleanor I. Chase to Gary Spackman, September 23, 1998

Exhibit 135: Letter from Eleanor I. Chase to the Department, July 9, 2001

Exhibit 136: City of Eagle United Water Operations Reports

Exhibit 137: Agreement to Provide Supplemental Water for Fire Flows

Exhibit 138: Cooperative Agreement

Exhibit 139: Water Line Agreement

Exhibit 140: Agreement dated December 2, 1997

Exhibit 141: Well Purchase Agreement

Exhibit 142: Notice of Claim No. 63-5224

Exhibit 143: Partial Decree No. 63-5225

Exhibit 144: Amended Notice of Claim No. 63-5226

Exhibit 145: Notice of Claim No. 63-5227

Exhibit 146: Amended Notice of Claim No. 63-5229

Exhibit 147: Notice of Claim No. 63-8663

Exhibit 148: License No. 63-8663

Exhibit 149: IDWR Field Report for No. 63-8663

Exhibit 150: Partial Decree No. 63-15820

Exhibit 151: Partial Decree No. 63-18731

Exhibit 152: ERO Resources, Inc., Report Regarding Wells for No. 63-5226 and No. 63-5229

Exhibit 153: Resume of David B. Shaw, P.E.

Exhibit 154: Beneficial Use Field Report for Permit No. 63-12192

Exhibit 155: Diagram of Selected Well Locations

Exhibit 156: 1970's photograph of barn and Chase Dairy

Exhibit 157: 1952 photograph of barn

Exhibit 158: 1952 photograph of barn and Chase dairy.

The Department, on its own initiative and without objection from the parties, admitted the following exhibit:

Exhibit 400: Summary of water rights located in the NESE, Section 5, T4N, R1E.

The following individuals testified on behalf of Eagle:

- a. Ms. Lynne Sedlacek, Eagle City Councilmember;
- b. Mr. Vernon Brewer, representative of Eagle City Engineer, Holladay Engineering Co.;
- c. Mr. Terry M. Scanlan, P.E., P.G., Scanlan Engineering; and
- d. Nancy Merrill, Eagle Mayor.⁴

The following individuals testified on behalf of the Chase Estate:

- a. Mr. Mike Chase, Chase Estate;
- a. Mr. Dave Shaw, ERO Resources, Inc.;
- b. Mr. Bill Chase, Chase Estate; and
- c. Mr. Vernon Brewer, representative of Eagle City Engineer, Holladay Engineering Co.

No other party offered exhibits or testimony for the Department's consideration. All parties present at the hearing were afforded the opportunity to cross-examine the opposing side's witnesses.

⁴ Ms. Merrill's testimony was presented in writing and is in the Department's files as the *Sworn Testimony of Nancy Merrill, Mayor, City of Eagle in Support of City's Application to Amend Permit No. 63-12448*.

ANALYSIS OF EXCEPTIONS

There was significant discussion in the record and in the briefs about whether the impacts to other wells should be based on an average ground water withdrawal rate anticipated by Eagle or the maximum withdrawal rate allowed under the permit. Unless Eagle limits the withdrawal rate sought, the Department must assume that Eagle may divert the full authorized quantity of water from any one of the authorized or proposed points of diversion and evaluate the effects of such withdrawals based on the maximum authorized diversion rate and volume. The maximum diversion rate authorized by permit no. 63-12448 is 3.25 cubic feet per second (cfs), equivalent to approximately 1,460 gallons per minute (gpm). However, Eagle has designed the proposed well to produce a maximum of 1,000 gpm. Because water right no. 63-12448 limits the annual volume diverted to 1,455 acre-feet, Eagle could withdraw 902 gpm continuously for the entire year. Technical analysis in the record assumes a withdrawal rate of 1,000 gpm. Assuming a continuous withdrawal rate of 1,000 gpm at any one of the authorized or proposed points of diversion provides a reasonable basis for evaluating the effects of ground water withdrawals under permit no. 63-12448.

For this analysis, the following is a summary of wells owned by the Chase Estate for which testimony about use of water was presented into the record:

Water Right No.	Well Name	Beneficial Use	Water Right Status	Priority Date	Withdrawal Rate
63-15820	Dairy-domestic	Domestic	Decreed	Jan. 1, 1920	0.04 cfs
63-05226	Dairy-domestic	Domestic, stock, & commercial	Beneficial use claim	Jan. 1, 1950	0.31 cfs ⁵
63-05229	Small irrigation	Irrigation, stock, & domestic	Beneficial use claim	Oct. 27, 1925	0.46 cfs
63-08663	Large irrigation	Irrigation	Licensed	April 6, 1977	2.0 cfs

For this analysis, the following is a summary of ground water rights held or claimed by the Chase Estate for which the Chase Estate submitted water right information as exhibits, but no testimony was presented about the identity or production of the associated wells:

Water Right No.	Well Name	Beneficial Use	Water Right Status	Priority Date	Withdrawal Rate
63-05224	(not known)	Domestic, stock, & irrigation	Beneficial use claim	Jan. 1, 1872	0.10 cfs
63-05225	(not known)	Domestic & stock	Decreed	Jan. 1, 1900	0.17 cfs
63-18731	(not known)	Domestic	Decreed	Aug. 1, 1982	0.04 cfs

In 1951, the Idaho Legislature enacted legislation known as the Ground Water Act. In 1953, the Idaho Legislature amended the Ground Water Act. The 1953 Amendment recognized that ground water rights would be administered according to the prior appropriation doctrine, but

⁵ Mike Chase testified that the flow rate should be reduced to 0.13 cfs.

that senior water rights should not prevent the full economic development of the ground water resources of the State of Idaho, and that ground water appropriators would be required to pump from "reasonable pumping levels" established by the Department. In 1978, the Idaho Legislature amended the Ground Water Act again. The 1978 Amendment expressly stated that domestic water rights were subject to reasonable pumping levels.

The priority dates recognized or claimed for the water rights authorizing diversion from the dairy-domestic well (no. 63-05226 and no. 63-15820) and the small irrigation well (no. 63-05229) predate the enactment of the Ground Water Act in 1951 and the subsequent amendment to the Ground Water Act in 1953. In addition, the priority dates for claim no. 63-05224 and water right no. 63-05225 (for which no production data was submitted) also predate the enactment of the Ground Water Act in 1951 and the subsequent amendment to the Ground Water Act in 1953.

In *Parker v. Wallentine*, 103 Idaho 506, 650 P.2d 648 (1982), the Idaho Supreme Court determined that a later in time appropriator should be enjoined from pumping ground water for irrigation that almost immediately dried up a domestic well located nearby. The Court held that the water right for the domestic well was perfected prior to the irrigation water right and before the reasonable pumping level standard was applied to domestic beneficial uses, and that the domestic water right holder was entitled to the protection of the ground water levels existing prior to the junior appropriation. The Court held that the injunction was not permanent, and could be absolved upon full compensation by the junior appropriator for the cost of deepening the senior appropriator's well and payment of the costs of additional equipment and energy.

Under the principles of *Parker*, if (1) withdrawal of ground water by a junior ground water appropriator causes declines in ground water levels in wells owned by the senior water right holders because of local well interference, and (2) the water rights held by the senior water right holders bear priority dates earlier than 1951, or 1978 for domestic water rights, the holders of the senior water rights are, at a minimum, entitled to compensation for the increased costs of diverting ground water caused by the declines in ground water levels at the point of diversion. In so applying the Court's holding in *Parker*, the Department acknowledges that the Court in that case may not have taken into consideration the applicable common law principles of the prior appropriation doctrine that predate the Ground Water Act. The Court may at some future date address whether ground water rights that predate the Act enjoy an absolute protection from interference by junior appropriators regardless of the reasonableness of the means of diversion used by the senior right holder.

The extent to which *Parker* provides protection to the ground water levels for the Chase Estate water rights depends on proof of injury and similarities to the facts of the *Parker* case. In *Parker*, the owner of the domestic well was unable to divert water from the domestic well within minutes of when the junior priority right holder began withdrawing ground water. The proof of lowered ground water levels caused by the irrigation well that resulted in inability to withdraw water from the domestic well was established through testimony about the effects of the initial diversion from the Wallentine well and by a pump test conducted by the parties and the Department.

In an administrative hearing for an application to amend a permit, the applicant bears the burden of proving that the proposed change will not adversely affect other water rights. If a protestant seeks the protection of *Parker* that would insulate the protestant from the reasonable pumping level standard of the Ground Water Act, however, the protestant must come forward with evidence that (1) the protestant is the holder of a water right that is not subject to the Ground Water Act, and (2) the protestant's means of diversion (equipment and facilities) is capable of diverting water under the water right from ground water at levels existing when the application to amend a permit is considered by the Department. Once the protestant comes forward with the information, the applicant ultimately bears the burden of proving that the amendment would not injure the protestant under the *Parker* standard.

Evidence to Establish Protection from Reasonable Economic Pumping Standard

Witnesses for the Chase Estate testified that the dairy-domestic well produces sufficient water for the dairy and the domestic uses. The current need for the Chase Dairy is 0.13 cfs. Another 0.04 cfs is provided as domestic water to the Chase residence near the dairy, for a total current supply of 0.17 cfs. At the time of the hearing, the static water level in the dairy domestic well was 20 feet 10 inches, and the pumping depth was between 20 feet and 25 feet. Claim no. 63-05226 and water right no. 63-15820 describe the dairy-domestic well as the point of diversion, and the water right and the claim bear priority dates that pre-date the date of the Ground Water Act. The Chase Estate provided sufficient information about the dairy-domestic well to invoke the protection of *Parker*.

The priority date for water right no. 63-05229 authorizing the diversion of ground water from the small irrigation well predates the Ground Water Act. Nonetheless, the Chase Estate and its predecessors have not withdrawn ground water from the small irrigation well since 1983, because the place of use has been irrigated with waste water. Eagle's expert witness, Terry Scanlan, testified that the pump in the small irrigation well is not presently capable of withdrawing water because ground water levels have already declined below the level at which the pump could withdraw water. Dave Shaw, expert witness for Chase Dairy, testified that the pump connected to the small irrigation well would currently produce water for the water right. However, no information from an actual pumping test was submitted. The Chase Estate came forward with some information about the small irrigation well indicating that *Parker* should apply if the existing diversion works can withdraw water under existing ground water conditions.

The Chase Estate did not offer evidence about ground water diversions authorized by other ground water rights that predate the date of the Ground Water Act.

General Injury Analysis

The effects on ground water levels in the Chase Estate wells caused by withdrawing ground water from the proposed Eagle well no. 3 was predicted by experts retained by Eagle and by the Chase Estate. Exhibit 102 is a 2002 report prepared by Bill Strowd, a former employee of Holladay Engineers, the firm Eagle retained as the city engineer. Both parties agreed the report is the best compilation of ground water information related to construction of the proposed Eagle well no. 3. Page 12 (unnumbered) of the Strowd report is a vicinity map of the area where

construction of Eagle well no. 3 is proposed. Superimposed on the map is a series of concentric circles that represent water surface elevations of a theoretical pumping cone of depression. The parties referred to the document as a "bull's-eye" diagram. The diagram was developed by assuming a continuous ground water withdrawal rate of 1,000 gallons per minute for a period of 6 months.

Each of the circles locates the radius from the pumping center at which water levels will decline by equal amounts below pre-pumping ground water levels. The concentric circles define a three dimensional depiction of ground water levels that resembles a cone standing on its narrow end. Ground water levels in the cone of depression are deeper the closer the location to the pumping center of the cone. The sides of the cone do not have a constant slope; rather, the slope of the sides of the cone become steeper as the radial distance to the pumping center decreases. The changing slope or gradient towards the center of the cone is illustrated by the reduction of the distance between the concentric circles of equal declines as the circles become smaller and are closer to the center of the cone.

The inner circle drawn on the cone of depression diagram is located 1,000 feet away from the center of the cone of depression. At a radius of 1,000 feet, the report estimates a drawdown of 8 feet.

Injury Analysis for the Dairy-Domestic Well

The dairy-domestic well is located 509 feet from the site proposed for Eagle well no. 3, which is about halfway between the 1,000 foot radius circle on the bull's-eye diagram and the proposed site for Eagle well no. 3. Since the gradient of the ground water levels increase the closer to the center of the cone of depression, predicted ground water level declines at half the distance between the 1,000 foot radius circle and the center of the cone of depression may be several times the drawdown of 8 feet expected at a radial distance of 1,000 feet. The present static water level in the Chase dairy-domestic well is 20 feet 10 inches, and the pumping depth is between 20 feet and 25 feet. The experts agreed that double-digit declines of the ground water level in the dairy-domestic well will cause failure of the dairy-domestic diversion works to supply water for the dairy and domestic uses.

Because of the close proximity of the dairy-domestic well to the proposed Eagle well no. 3, it is likely that withdrawing ground water from Eagle well no. 3 will cause a decline in ground water levels in the dairy-domestic well below the level at which the present diversion works can divert water. As a result, approval of the proposed Eagle well no. 3 as an alternate point of diversion for permit no. 63-12448 is expected to result in injury to water right no. 63-15820 and any right resulting from claim no. 63-05226.

Injury Analysis for the Small Irrigation Well

The small irrigation well is located 820 feet from the site proposed for Eagle well no. 3. The small irrigation well is located within the 1,000 foot radius circle where the rate of decline in ground water levels increases significantly as the distance to the center of the cone of depression decreases. Predicted ground water declines at the location of the small irrigation well caused by

ground water withdrawals at the proposed Eagle well no. 3 could be in the range of double the predicted ground water drawdown of 8 feet at a radial distance of 1,000 feet.

It is likely that withdrawing ground water from the proposed Eagle well no. 3 will also cause declines in the ground water level at the location of the small irrigation well. However, Eagle is not required to protect the Chase Estate against declines in ground water levels that occurred prior to the construction and operation of the proposed Eagle well no. 3. From 1970 to 1989, ground water levels in the area of the proposed Eagle well no. 3 declined approximately 10 feet. Exhibit 103, at p. 18. Increases in overall ground water diversions and other factors, such as drought, may have caused these ground water declines. Because the Chase Estate and its predecessors have not withdrawn ground water from the small irrigation well since 1983, there is presently insufficient information available to determine the injury, if any, that the Chase Estate might incur from construction and operation of the proposed Eagle well no. 3. The Department cannot protect the ground water level for the Chase Estate small irrigation well unless the Estate has sufficient information to show that the water rights for the small irrigation well can be exercised at present ground water levels.

Eagle should not be enjoined from constructing and operating Eagle well no. 3 by a claim of injury to a water right that has not been exercised for over 20 years and under which right ground water may not be available for diversion using the existing diversion works. However, the Chase Estate may conduct a pump test using the existing diversion works (equipment and facilities) to demonstrate the existing availability of ground water and the capacity of the existing diversion works prior to completion of construction and operation of the proposed Eagle well no. 3. The pump test must be coordinated with Eagle and approved by the Department. Any sustainable diversion of ground water from the small irrigation well using the existing diversion works at current ground water levels, verified by the pump test, is protected from ground water declines caused by the operation of Eagle well no. 3.

Analysis of Injury to the Large Irrigation Well

Irrigation from the large irrigation well owned by the Chase Estate is authorized by a water right bearing a priority date later than the date of amendment to the Ground Water Act. Although the present ground water level in the large irrigation well is unknown, the intake for the turbine pump in the well is set at approximately 90 feet. The decline in ground water levels at the large irrigation well caused by construction and operation of the proposed Eagle well no. 3 is predicted by the cone of depression diagram to be approximately 4 feet. While this decision does not establish a reasonable pumping level, an additional 4 feet of decline in the ground water level at the large irrigation well from the present ground water level, presumed to be above 90 feet, is above the reasonable pumping level. Injury to the water right for the large irrigation well from construction and operation of the proposed Eagle well no. 3 is not expected.

Injury Analysis for Other Chase Estate Wells

Two other wells owned by the Chase Estate are located on a map received into evidence as Exhibit 1. The two wells are identified as points of diversion for water rights added to the Findings of Fact in this Final Order. While ground water withdrawals from the proposed Eagle

well no. 3 will result in ground water declines at the locations of these two wells, no information was submitted about historic diversions from the wells, whether there are operational diversion works in the wells, and whether there are ground water levels that are protected under *Parker*.

The Chase Estate took exception to the Hearing Officer's Amended Recommended Order for not addressing all the water rights held by the Chase Estate. Because sufficient information about the water rights associated with these two wells was not presented at the hearing, the Amended Recommended Order and this Final Order need not address these rights in the Findings of Fact or Conclusions of Law.

Injury Analysis for the Burton Group Wells

Finally, a group of wells depicted on Exhibit 4, and labeled as wells owned by the "Burton Group," are located in sufficiently close proximity to the proposed Eagle well no. 3 that ground water levels in the wells will decline as a result of ground water withdrawals from the proposed Eagle well no. 3. Finding No. 49 in the Amended Recommended Order addressed these wells. A portion of the Finding stated:

There are a number of domestic wells directly to the north of the Chase Estate's small irrigation well. They are shown on Exhibit 4 and are labeled the Burton Group Wells. Information in the record regarding these wells is limited. *See* Exs. 14 and 400. At least two wells in this area operate under water rights with priority dates of 1917 and 1962. These wells would be hydraulically connected to the proposed Eagle Well no. 3, although they likely do not penetrate to the deeper aquifer zone.

Comparing the list of Burton Group participants with the holders of water rights listed in Exhibit 400, reveals that Darrell Davis is the only name found in both lists. Darrell and Marla Davis hold decreed water right no. 63-04546 bearing a priority date of July 15, 1962. The water right authorizes domestic and stockwater uses. The priority date predates the 1978 amendment to the Ground Water Act, subjecting domestic wells to the reasonable pumping level standard. The Davis well is a well that is eligible for protection of water level declines under *Parker*.

Water right no. 63-04546 authorizes use of a point of diversion in the NESE, Section 5, T4N, R1E. The record does not precisely locate the Davis well within the NESE of Section 5. The Davis point of diversion may be located a minimum of approximately 1,500 feet and a maximum of approximately 3,000 feet from the location of the proposed Eagle well no. 3. Ground water level declines in the Davis well predicted by the cone of depression diagram could be from approximately 6 feet at a distance of 1,500 feet to 3.5 feet at a distance of 3,000 feet.

Exhibit 14 shows that the Davis well is four inches in diameter. Water levels in the Davis well were not measured. Davis did not submit any information about present ground water conditions or capacity of the well.

A determination of whether ground water withdrawals from the proposed Eagle well no. 3 would injure Davis and other owners of wells under the *Parker* standard is dependent on the date of priority of the water rights for the wells and an analysis of the diversion works employed by the well owners. Some evidence about the water right for the Davis well was submitted, but

the well was not located. Evidence about the water rights authorizing diversion from other wells was not submitted at the hearing. No evidence was submitted about the present pumping ground water conditions or capacity of the Davis or other Burton Group wells.

Eagle made a prima facie case that injury, in general, would not occur to the Burton Group wells by construction and operation of the proposed Eagle well no. 3. To assert protection under *Parker*, the water right holders alleging injury must come forward with information about their water rights and diversion works for analysis by the Department and the applicant. The required evidence was not presented.

Eagle Well No. 4

The Hearing Officer did not recommend approval of an additional point of diversion for the proposed Eagle well no. 4 on the basis that evidence wasn't presented about the well addressing the criteria that must be considered by the Department. After reviewing the evidence, the Director agrees that Eagle did not present evidence about the design and exact location of the proposed well, that Eagle owns or has access to the property where the well is proposed to be constructed, or that the proposed Eagle well no. 4 would not adversely affect other water users. However, the evidence in the record provides the basis for determining the expected effects on the protestants' wells.

The cone of depression diagram used to predict drawdowns expected by the proposed Eagle well no. 3 was developed from data collected and analyzed after an extended pumping test for Eagle well no. 1 at the time it was constructed. The proposed Eagle well no. 4 would be located between one-quarter and one-half mile northwest from Eagle well no. 1. Assuming the subsurface geological formations underlying the proposed location for Eagle well no. 4 are similar to the subsurface geological formations underlying Eagle well no. 1, the cone of depression diagram can be superimposed over the location for the proposed Eagle well no. 4.

The proposed Eagle well no. 4 would be located about three-quarter mile northeast of the proposed Eagle well no. 3. The Chase Estate wells are all located west of the proposed Eagle well no. 3, and the nearest Chase Estate well would be located approximately three-quarters of a mile from the location of the proposed Eagle well no. 4. The nearest well of the Burton group wells is also located approximately three-quarters of a mile away from the proposed Eagle well no. 4, which is greater than the distance between the location of the proposed Eagle well no. 3 and the nearest well of the Burton group wells. Because the proposed Eagle well no. 4 would be located a significant distance further away from the Chase Estate wells and the Davis and other Burton Group wells than the proposed Eagle well no. 3, Eagle well no. 4 will have substantially less adverse effects on the Chase Estate wells and on the Davis and other Burton Group wells than would the proposed Eagle well no. 3.

Local Public Interest

During examination of Eagle's witnesses, the Chase Estate attempted to establish that the construction of the proposed points of diversion is not in the local public interest. The Chase Estate asserted that Eagle had contracted with United Water Idaho, Inc., to provide a back-up

water supply from United Water's Floating Feather well, and the back-up water supply was approved by the Idaho Public Utilities Commission, which held that providing water from the back-up well was in the local public interest. The fact that one alternative supply was in the local public interest to serve a then-present public need does not preclude subsequent proposals from also being in the local public interest. Eagle is committed to owning a stand-alone, independent water system without crossover commitments to other water service providers. The goal of Eagle to independently own and control its water system is in the local public interest.

Advancement of Priority

The application for amendment does not propose an enlargement of use of the permit. As a result, there is no justification for advancement of the priority date. The priority date should remain April 8, 1998.

Miscellaneous Exceptions

References inferring that a supplemental water right does not receive full protection under the law will be eliminated.

FINDINGS OF FACT

Applicant and Permit No. 63-12448

1. Eagle is a municipal corporation under the laws of the State of Idaho. Eagle owns a municipal water system serving several developments in Eagle under water right permit no. 63-12448 (the "Permit") with a priority date of April 8, 1998. The current water use authorized under the Permit is described as follows:

Source of Water:	Ground water from a water bearing zone between 183 to 602 feet
Point(s) of Diversion:	NWSW, Section 3, T4N, R1E, B.M., Ada County, Idaho SWSW, Section 3, T4N, R1E, B.M., Ada County, Idaho SESW, Section 5, T4N, R1E, B.M., Ada County, Idaho
Use(s):	Municipal
Total Quantity:	3.25 cfs / 1,455 acre feet annually
Period of Use:	January 1 – December 31 (year-round)
Place of Use:	Within the city limits of Eagle and surrounding service area.

Source of Water

2. The ground water source underlying the points of diversion authorized by the Permit is characterized as a leaky water table aquifer, with attenuated communication from shallow, water bearing zones to deep-water zones. The vertical gradient is generally from shallower to deeper. The aquifer is generally described in a report prepared by the engineering firm CH2M Hill in June 1991 following a 30-day pump test at one of the currently authorized points of diversion for the permit, referred to later in these Findings of Fact as Eagle well no. 1:

The aquifer is characterized as a complexly stratified water table aquifer consisting of highly permeable sand layers and lenses separated by discontinuous and leaky sandy clays. Aquifer response to pumping is expected to behave as a single thick water table aquifer with significant delayed yield due to gravity drainage early in the pumping period and close to the well. In distant observation wells the response during the relatively short 30-day pumping period was more indicative of a confined aquifer owing to the stratified nature.

Exhibit 104 at 52.

"Lateral inflow from the aquifer margin to the north and east and seepage from canal and irrigation laterals are probably the most significant sources of water." Exhibit 104 at 3. Although the points of diversion under the Permit are spread laterally over approximately one mile, the authorized points of diversion and the proposed additional points of diversion are in the same aquifer and are hydraulically connected. No evidence was presented to show that current ground water withdrawals from the existing points of diversion authorized under the Permit detrimentally impacted other wells or surface water diversions.

3. From 1970 to 1989, ground water levels in the area of the proposed additional points of diversion declined approximately 10 feet. Exhibit 103, Page 18. Ground water levels in the area may have also declined after 1989. Data from two wells monitored by Terry Scanlan, an expert witness for Eagle, show declines of 2 to 8 feet from 1998 to 2003. See Exhibit 7. The recorded ground water declines may have been caused by increased pumping, drought, or changes in recharge. Increased pumping from an aquifer will lower ground water levels, steepen the gradient to the location of the point of ground water diversion, and draw more water from the boundaries of the aquifer, ultimately resulting in equilibrium at lower ground water levels.

Points of Diversion

4. Eagle well no. 1: This well, located in the SWSW, Section 3, T4N, R1E, also known as Lexington Hills well no. 1, is currently Eagle's primary municipal well. It supplies all the municipal water used during normal operation of the system. Two pumps, one with a capacity of 160 gallons per minute ("gpm") and the other with a capacity of 800 gpm, draw from the well and can be operated together. Water quality and stability of production at this well are both excellent. Exhibit 106 at 11.

5. Eagle well no. 2: This well, located in the NWSW, Section 3, T4N, R1E, also known as Lexington Hills well no. 2, is no longer used due to high iron content in the water and excessive sand production.

6. Floating Feather Well: This well, located in the SESW, Section 5, T4N, R1E, is owned and operated by United Water Idaho. The Floating Feather well provides Eagle with a reliable second well to satisfy minimum municipal water system requirements pursuant to a number of agreements between Eagle and United Water Idaho. Exhibits 16, 17, 18. At the time of the hearing, the entire water service for the Brookwood Subdivision was being supplied by the Floating Feather Well.

Use

7. Eagle's municipal water system serves the Lexington Hills, Echo Creek, Crown Point, and Brookwood residential subdivisions, including Lexington Hills School, and can serve other potential residential subdivisions in the same general area. The system distributes potable water and fire flows to the subdivisions. There is a 12-inch diameter trunk line along the north side of Floating Feather Road that interties the system with the United Water Idaho distribution network and Hidden Hollow Reservoir. Irrigation water is largely supplied to the subdivisions through a parallel surface water irrigation system.

Total Quantity

8. Permit no. 63-12448 authorizes Eagle to instantaneously withdraw ground water at a maximum rate of 3.25 cfs and a volume of up to 1,455 acre-feet annually. The instantaneous diversion rate of 3.25 cfs equals approximately 1,460 gpm. The annual volume of 1,455 acre-feet equals a continuous average diversion rate of 902 gpm. The rate and volume limitations apply to the combined quantities of ground water diverted under all of Eagle's current water right permits; no. 63-11413, no. 63-12017, and no. 63-12448. Because Eagle does not have storage in its system, it must meet peak demands by increasing the rates of diversion at its wells, subject to the combined diversion rate limitation of 3.25 cfs.

Period of Use

9. Eagle's municipal water system is used every day of each year for potable water needs, irrigation during the irrigation season, and may at any time be needed for fire suppression.

Place of Use

10. A general representation of Eagle's water service area boundary is shown on Exhibits 3 and 4. A general representation of the actual area served by Eagle's water system is shown on the second map in Appendix I of Exhibit 106. The physical characteristics of the planning area are described as follows:

The topography of the Planning Area generally comprises relatively high ground in Section 3 and the E ½ of Section 4, and ground water 50 to 100 feet lower than the

foregoing in the Dry Creek Valley in the W ½ of Section 4 and the E ½ of Section 5. There is a prominent bluff, 30 to 50 feet high, defining the boundary between the higher ground and the valley of Dry Creek, but the higher ground is rolling hills with elevation differences as great as 60 feet above the approximate top of the bluff. For practical management, the bluff divides the Planning Area into two service pressure zones

Exhibit 106 at 12.

Extension of Time for Filing Proof of Beneficial Use

11. Eagle filed the currently pending application to amend permit no. 63-12448 on June 8, 2001, and the application was protested. Eagle requested a 5-year extension of time to file proof of beneficial use on the basis that the contested application for amendment had been pending since 2001, and the contested case had not been heard or resolved.

12. Permit no. 63-12448 was approved on December 3, 1998. At the time of approval, the Department granted 5 years for development and beneficial use of water. On December 4, 1998, Eagle filed application to amend permit no. 63-12448 (prior to the current application for amendment), which was contested and finally approved on April 7, 2000. The development period that expired between approval of the first amendment and the filing of the second application for amendment was approximately 1 year. As a result, approximately 4 years of the development period was lost because of contests to applications for amendment between the time the permit was approved and the time when proof of beneficial use was due.

Proposed Project

13. Eagle's Application requests that two additional points of diversion be approved for permit no. 63-12448 without any increase in the diversion rate under the Permit. Eagle needs at least two wells for its municipal system. The Idaho Department of Environmental Quality requires that community water systems supplying ground water to more than 25 homes have a minimum of two sources. IDAPA 58.01.08.550.03.p. Beyond this legal requirement, having a minimum of two wells provides Eagle many technical advantages. Two or more wells provide redundancy if a particular well fails or needs maintenance. Two or more wells also provide greater capacity for meeting emergency demands. Water supplies are more reliable with two or more wells, and having two more wells provides Eagle the ability to rest a well, extending the life of pumps. Having two or more wells also spreads the effects on the aquifer. Finally, if Eagle could develop new wells in the Dry Creek Valley below the bluff upon which Eagle well no. 2 is located, the new wells could provide water directly to the lower pressure zone without having to reduce pressure from the higher pressure zone on the bluff.

14. Eagle desires to develop an independent, city-owned, municipal water system that does not rely on contracts with third parties. If the application for amendment is not approved, Eagle would have to continue its contractual relationship with United Water Idaho to use the Floating Feather Well.

Eagle Well No. 3 (Brookwood Well)

15. Eagle's application for amendment seeks an additional point of diversion in the SWSW, Section 4, T4N, R1E. Eagle proposes to construct a well near the northeast corner of the intersection of Eagle and Floating Feather Roads that would be known as Eagle well no. 3 or the Brookwood well. A well constructed at this location would supply the Eagle municipal water system with a point of diversion in the lower zone of its service area. Eagle well no. 3 is an authorized point of diversion for permits no. 63-11413 and no. 63-12017 also held by Eagle.

16. Eagle submitted plans and specifications for the proposed Eagle well no. 3 with other details for evaluation of the water resource impact of the well. Exhibit 2. The well would be 335 feet deep, with a production zone from 220 to 330 feet below ground surface. The minimum, sustained, rate of withdrawal for the well as designed is 1,000 gpm, but no current condition in permit no. 63-12448 would prevent Eagle from withdrawing water from the proposed Eagle well no. 3 at the maximum diversion rate of approximately 1,460 gpm. Eagle anticipates diverting an average of 200 to 280 gpm from the proposed Eagle well no. 3 provided Eagle Well no. 1 is in operation. The Idaho Department of Environmental Quality has reviewed and approved the well design and well site for the proposed Eagle well no. 3, although at the time of the hearing the well construction approval had expired and the well design had been resubmitted for approval. The proposed well location is located outside of the floodplain of Dry Creek.

17. Construction of the proposed Eagle well no. 3 is a condition of development of the Brookwood subdivision by Aries Development, LLC. Aries Development, LLC, agreed to construct the proposed Eagle well no. 3 as a joint venture with Eagle. Exhibit 141. Eagle contracted to purchase the well upon completion pursuant to a *Well Purchase Agreement* with Aries Development, LLC. Eagle budgeted \$200,000.00 for the purchase of the proposed Eagle well no. 3 in Eagle's *Capital Improvement Plan* for the fiscal year following the hearing. Eagle has already invested significant capital in the proposed well site. It is reasonably certain that Eagle will continue to budget in the future for construction of the well.

Eagle Well No. 4

18. Eagle's application for amendment also seeks an additional point of diversion in the NESE, Section 4, T4N, R1E, which is about three-quarter mile northeast of the location proposed for Eagle well no. 3. Exhibit 3. Eagle seeks to reserve this well site, which is located southwest of the intersection of Edgewood Road and Dry Creek within about one-quarter mile from Eagle well no. 2, if the proposed Eagle well no. 3 is not a productive well. Eagle well no. 4 is an authorized point of diversion for permits no. 63-11413 and no. 63-12017 also held by Eagle. Eagle does not own the site or have legal access to the site, although Eagle does have eminent domain authority, which could be exercised if necessary to gain access to the site. Eagle has not designed the well.

Effects On Ground Water Levels and Water Quantity Under Existing Water Rights

19. Four written studies relevant to the Application have been conducted: a June 1991 aquifer analysis by CH2M Hill; a June 1991 IDWR open-file report on ground water conditions in the Dry Creek area; a July 1995 aquifer pumping test at the Floating Feather Well by Terry Scanlan; and an August 2001 summary of ground water conditions in the vicinity of the proposed Eagle well no. 3 by Bill Strowd.

20. The CH2M Hill report prepared in 1991, Exhibit 104, is based primarily on an extended pump test conducted using Eagle well no. 1, located one mile east of the proposed Eagle well no. 3 site. From that pump test, CH2M Hill derived aquifer characteristics in the study area. From those aquifer characteristics, CH2M Hill simulated the aquifer's response to various pumping scenarios.

21. The IDWR open file report prepared in 1991, Exhibit 103, analyzed the CH2M Hill aquifer test, water well measurements, and other data to assess concerns regarding the effects of expanding development in the Dry Creek area. The report also used the CH2M Hill data to further predict well interference caused by pumping from wells in the Dry Creek area. The key document in this analysis is a diagram of the predicted "cone of depression" caused by pumping ground water from Eagle Well no. 1 at 1,000 gpm for 6 months. Exhibit 103, p. 21, fig. 11. The prediction used a more conservative transmissivity value than used in the CH2M Hill report.

22. The Scanlan Report prepared in 1995, Exhibit 105, described the results of a pump test of United Water Idaho's Floating Feather well, located approximately one-half mile west of the proposed Eagle well no. 3 location. Scanlan monitored ground water levels for drawdowns in wells in the vicinity of the Floating Feather well during a 51-hour pump test at an average rate of 1,500 gpm. One monitored well was the Vail domestic well, located approximately 250 feet from the Floating Feather well. Observed drawdown in the Vail well was 1.4 feet. However, Scanlan calculated that the drawdown would have been 8.7 feet if the aquifer zone intercepted by the Vail well was directly connected to the zones intercepted by the Floating Feather well. Exhibit 105, p. 4. Another monitored well, identified as the Chase domestic well, was located approximately 1,000 feet from the Floating Feather well. Observed drawdown in the Chase domestic well was approximately 1.5 feet. However, Scanlan calculated that the drawdown would have been 5.7 feet if the aquifer zone intercepted by the Chase domestic well was directly connected to the zones intercepted by the Floating Feather well. Exhibit 105, p. 5. Scanlan suggested in his report that there are three aquifer zones in this area: a shallow unconfined aquifer zone to a depth of 50 feet, an upper confined aquifer zone extending from 100 to 170 feet, and a lower confined aquifer zone extending from 170 feet to depths of more than 335 feet. The Vail and Chase domestic wells described in the report penetrated the middle aquifer zone, while the Floating Feather well penetrated the lower aquifer zone. The drawdowns measured and computed by Scanlan suggest, however, that the confinement is limited, and that the aquifer zones are hydraulically connected.

23. The Strowd Report prepared in August 2001, Exhibit 102, analyzed the reports described in Findings 20 through 22, analyzed well logs in the vicinity of the proposed Eagle well no. 3, and predicted the effects of ground water withdrawals from the proposed Eagle well no. 3. The cone of depression diagram for Eagle well no. 1 in the IDWR open file report was

superimposed on the proposed Eagle well no. 3 point of diversion to show potential drawdowns caused by the withdrawal of 1,000 gpm for 6 months. Exhibit 102, Figure entitled "Estimated 6-Month Draw Down Based On 1,000 GPM Pumping." This figure predicts 8 feet of drawdown at 1,000 feet from the proposed Eagle well no. 3. This is a worst case analysis of predicted effects because the sustained average rate of withdrawal from the proposed Eagle well no. 3 is not expected to exceed 280 gpm, and the sustained average rate of withdrawal cannot exceed 902 gpm on a continuous basis. However, no condition in permit no. 63-12448 would prevent Eagle from withdrawing ground water from the proposed Eagle well no. 3 at the maximum instantaneous rate authorized of 1,459 gpm or a sustained average rate of 902 gpm. The assumed withdrawal rate of 1,000 gpm is a reasonable estimate of the maximum pumping rate. As a result, the cone of depression diagram is used to analyze probable effects on other wells caused by withdrawing ground water from the proposed Eagle well no. 3.

24. The Strowd Report concludes:

By employing this model, only the nearest wells to the Brookwood site should experience drawdowns in excess of five to six feet. Local wells exploiting another aquifer zone may be influenced even less. Wells within hundreds of feet of the Brookwood site, however, may experience drawdowns in excess of eight or ten feet.

Exhibit 102, p. 6.

Eagle testified that it was willing to mitigate for the impacts caused to senior water rights by its water use.

Effects on Chase Estate Wells

25. The Chase Estate holds several ground water rights represented by decree, license, or beneficial use claims, with points of diversion in the vicinity of proposed Eagle wells no. 3 and no. 4. The record contains water right information about the following water rights and claims held or claimed by the Chase Estate: no. 63-05224, no. 63-05225, no. 63-05226, no. 63-05229, no. 63-08663, no. 63-15820, and no. 63-18731. Information about well identification, exact well location, and use was only submitted for water right nos. 63-05226, 63-05229, 63-08663, and 63-15820. Only information about the wells described by these water rights are presented in these Findings of Fact, as discussed in the previous Analysis of Exceptions.

26. Water right no. 63-15820 has been decreed in the Snake River Basin Adjudication, Twin Falls County Case No. 39576 (the "SRBA"), Exhibit 150, and is described as follows:

Priority Date:	January 1, 1920
Source of Water:	Ground water
Point(s) of Diversion:	SESESE, Section 5, T4N, R1E
Use(s):	Domestic
Total Quantity:	0.04 cfs
Period of Use:	January 1 – December 31
Place of Use:	SESE, Section 5, T4N, R1E.

The point of diversion for this right is known as the Chase "dairy-domestic well." The dairy-domestic well is 240 feet deep with a 3-inch casing at ground surface. The dairy-domestic well is equipped with two ¾-horsepower, shallow, jet pumps that can lift water a maximum vertical distance of about 26 feet. In May 2003, the depth to water in the dairy-domestic well was measured at 20 feet, 10 inches from the top of the well casing. The dairy-domestic well is located 509 feet southwest of the proposed site for Eagle well no. 3.

27. Claim no. 63-05226 is a beneficial use right that has been claimed by the Chase Estate in the SRBA, and is described in the claim as follows:

Priority Date:	January 1, 1950
Source of Water:	Ground water
Point(s) of Diversion:	SESESE, Section 5, T4N, R1E
Use(s):	Stockwater, commercial, domestic
Total Quantity:	0.31 ⁶ cfs
Period of Use:	January 1 – December 31
Place of Use:	SESE, Section 5, T4N, R1E.

The point of diversion for this claim is the Chase dairy-domestic well. The water diverted under this water right is used for critical activities at the Chase Dairy. Loss of water under this water right for as short a period as four to six hours in the summer could injure the dairy cows, and after one to three days cows could die, which would irreparably damage the Chase Estate's dairy herd.

28. If the proposed Eagle well no. 3 withdraws 1,000 gpm for 6 months, the diversion is expected to cause drawdowns in the range of 20 to 40 feet in the Chase dairy-domestic well from which diversions of ground water are made under water right no. 63-15820 and claim no. 63-05226. Since the Chase dairy-domestic well is only 509 feet southwest of the proposed location of Eagle well no. 3, the expected drawdown caused by the withdrawal of 1,000 gpm for 6 months would be several times the drawdown of 8 feet predicted by the cone of depression diagram at a radial distance of 1,000 feet from the proposed well. Since the proposed Eagle well no. 4 would be located about three-quarter mile further away from the Chase dairy-domestic well than the proposed Eagle well no. 3, the expected drawdown caused by ground water withdrawals from the proposed Eagle well no. 4 would be substantially less than the drawdown caused by the proposed Eagle well no. 3.

29. Claim no. 63-05229 is a beneficial use right that has been claimed by the Chase Estate in the SRBA, and is described as follows:

Priority Date:	October 27, 1925
Source of Water:	Ground water
Point(s) of Diversion:	NESESE, Section 5, T4N, R1E
Use(s):	Irrigation of 20 acres, stockwater, domestic
Total Quantity:	0.46 cfs

⁶ Michael Chase testified that the correct quantity for this water right is 0.13 cfs.

Period of Use: Irrigation - 3/1 to 11/15
 Other - January 1 – December 31
Place of Use: SESE, Section 5, T4N, R1E.

The point of diversion for this claim is a well known as the Chase "small irrigation well." The small irrigation well is 280 feet deep with a 4-inch casing at ground surface. The small irrigation well is equipped with a 2 horsepower, centrifugal, end suction pump.

The water diverted from the small irrigation well supplements wastewater the Chase Estate uses to irrigate the place of use under claim no. 63-05229. The wastewater has supplied the entire irrigation needs for the place of use since 1983, and ground water has not been diverted from the small irrigation well since 1983. The Chase small irrigation well is located 820 feet northwest of the proposed site of Eagle well no. 3.

30. If ground water is diverted from the proposed Eagle well no. 3 at a rate of 1,000 gpm for 6 months, the diversion is expected to cause drawdown in the range of 10 to 20 feet in the small irrigation well from which ground water is diverted under claim no. 63-05229. Since the Chase small irrigation well is only 820 feet northwest of the proposed location of Eagle well no. 3, the expected drawdown caused by the withdrawal of 1,000 gpm for 6 months would probably be at least double the drawdown of 8 feet predicted by the cone of depression diagram at a radial distance of 1,000 feet from the proposed Eagle well no. 3. Since the proposed Eagle well no. 4 would be located about three-quarter mile further away from the Chase small irrigation well than the proposed Eagle well no. 3, the expected drawdown caused by ground water withdrawals from the proposed Eagle well no. 4 would be substantially less than the drawdown caused by the proposed Eagle well no. 3.

31. Water right no. 63-08663 is a licensed water right that has been claimed by the Chase Estate in the SRBA, and is described as follows:

Priority Date: April 6, 1977
Source of Water: Ground water
Point(s) of Diversion: NWSE, Section 5, T4N, R1E
Use(s): Irrigation of 100 acres, stockwater
Total Quantity: 2.0 cfs, 452.7 acre-feet annually
Period of Use: Irrigation - 3/15 to 11/15
 Other - January 1 – December 31
Place of Use: NWSE, SWSE, and SESE, Section 5, T4N, R1E.

The point of diversion for this right is a well known as the Chase "large irrigation well." The large irrigation well is 338 feet deep and has a 16-inch casing. The large irrigation well is equipped with a 25 horsepower, line-shaft, turbine pump that produces 2.0 cfs. The pump intake is currently set at 92 feet. In May 2003, the depth to water in the large irrigation well was measured at 58 feet, 3 inches from land surface. The large irrigation well is located 2,450 feet northwest of the proposed site for Eagle well no. 3.

32. If the proposed Eagle Well no. 3 withdraws 1,000 gpm for six months, the diversion is expected to cause approximately a 5-foot drawdown in the large irrigation well. Since the proposed Eagle well no. 4 would be located about one mile further away from the Chase large irrigation well than the proposed Eagle well no. 3, the expected drawdown caused by ground water withdrawals from the proposed Eagle well no. 4 would be substantially less than the drawdown caused by the proposed Eagle well no. 3.

Impact on Burton Group Wells

33. There are a number of domestic wells directly to the north of the Chase small irrigation well. The locations of the wells are shown on Exhibit 4 and are labeled the Burton Group wells. Information in the record regarding these wells is limited. See Exhibits 14 and 400. Exhibit 400 identifies water rights in the area of the Burton Group wells. The Burton Group wells are hydraulically connected to the proposed Eagle well no. 3, although the Burton Group wells likely are not deep enough to penetrate the deeper aquifer zone.

34. The list of Burton Group participants was compared with the holders of water rights listed in Exhibit 400. Darrell Davis was the only name found in both lists. Darrell and Marla Davis hold decreed water right no. 63-04546 with a priority date of July 15, 1962. The water right authorizes domestic and stockwater uses.

35. Water right no. 63-04546 has a point of diversion in the NESE, Section 5, T4N, R1E. The record does not precisely locate the Davis well within the NESE of Section 5. Exhibit 14 states that the Davis well is four inches in diameter. Water levels in the Davis well were not measured. Davis did not submit any information about present pumping capacity of the well.

36. Information about water rights, precise locations, and present pumping capacities of the Burton Group wells was not presented at the hearing.

37. The points of diversion for the Davis well and the other Burton Group wells are probably located a minimum of approximately 1,500 feet and a maximum of approximately 3,000 feet to the northwest of the proposed Eagle Well no. 3. The drawdowns predicted by the cone of depression diagram would be from approximately 6 feet at a distance of 1,500 feet to 3.5 feet at a distance of 3,000 feet. Since the proposed Eagle well no. 4 would be located even further away from Davis well and the other Burton Group wells than the proposed Eagle well no. 3, the expected drawdowns caused by ground water withdrawals from the proposed Eagle well no. 4 would be less than the drawdowns caused by the proposed Eagle well no. 3.

Impact on Other Wells

38. The undisputed testimony is that the proposed Eagle well no. 3 would minimally affect ground water levels in the wells of Weldon Fisher and Eagle Water Company. Since the location of the proposed Eagle well no. 4 would be about the same distance away from the eastern-most well of Eagle Water Company as the proposed Eagle well no. 3 and further away from the other Eagle Water Company wells and the Weldon Fisher well than the proposed Eagle

well no. 3, operation of Eagle well no. 4 would also minimally affect ground water levels in the wells of Weldon Fisher and Eagle Water Company.

CONCLUSIONS OF LAW

Based on the Findings of Fact and applicable Idaho law, the Director makes the following Conclusions of Law.

Effect on Other Water Rights

1. The Director must determine whether the proposed amendment of permit no. 63-12448 will adversely affect other water rights.

2. In 1951, the Idaho Legislature enacted legislation known as the Ground Water Act. In 1953, the Idaho Legislature amended the Ground Water Act. The 1953 Amendment recognized that:

while the doctrine of "first in time is first in right" is recognized, a reasonable exercise of this right shall not block full economic development of underground water resources, but early appropriators of underground water shall be protected in the maintenance of reasonable ground water pumping levels

Idaho Code § 42-226.

In 1978, the Idaho Legislature again amended the Ground Water Act. The 1978 Amendment expressly stated that domestic water rights are subject to the reasonable economic pumping level standard.

3. In *Parker v. Wallentine*, 103 Idaho 506, 650 P.2d 648 (1982), the Idaho Supreme Court determined that a later in time appropriator should be enjoined from withdrawing ground water for irrigation that almost immediately caused the ground water level to drop below a domestic well located nearby. The Court held that the water right for the domestic well was perfected prior to the irrigation water right and before the reasonable pumping level standard was applied to domestic beneficial uses, and that the domestic water right holder was entitled to the protection of the ground water pumping level existing prior to ground water withdrawals by the junior appropriator. The Court held that the injunction was not permanent, and could be absolved upon full compensation by the junior appropriator for the cost of deepening the senior appropriator's well and payment of the costs of additional equipment and energy.

4. The Idaho Supreme Court stated in *Parker v. Wallentine*:

Under the doctrine of prior appropriation, because Parker's domestic well was drilled prior to Wallentine's irrigation well, Parker has a vested right to use the water for his domestic well. That right includes the right to have the water available at the historic pumping level or to be compensated for expenses incurred if a subsequent appropriator is

allowed to lower the water table and Parker is required to change his method or means of diversion in order to maintain his right to use the water.

103 Idaho 506, 512 (1982) (emphasis added).

The Idaho Supreme Court went on to note that:

Parker will not be deprived of any right to his use if water can be obtained for Parker by changing the method or means of diversion. The expense of changing the method or means of diversion, however, must be paid by the subsequent appropriator, Wallentine, so that Parker will not suffer any monetary loss. Thus, upon a proper showing by Wallentine that there is adequate water available for both he and Parker, it is within the inherent equitable powers of the court upon a proper showing and in accordance with the views herein expressed to enter a decree which fully protects Parker and yet allows for the maximum development of the water resources of the State.

103 Idaho at 514.

5. Under the principles of *Parker*, if (1) diversion of ground water by junior ground water appropriators causes declines in ground water levels in wells of senior water right holders because of local well interference, and (2) the water rights held by the senior water right holders bear priority dates earlier than 1951, or 1978 for domestic water rights, the holders of the senior water rights are, at a minimum, entitled to compensation for the increased costs of diverting ground water caused by the declines in ground water levels.

6. The extent to which *Parker* provides protection to the Chase Estate water rights depends on proof of injury and factual similarities to the facts of the *Parker* case.

7. In *Parker*, the owner of the domestic well was unable to divert water from the domestic well within minutes of when the junior priority right holder began withdrawing ground water. The proof of the lowered ground water level caused by diversion of ground water from the irrigation well that resulted in inability to divert ground water from the domestic well was established through testimony about the effects of the initial withdrawals from the Wallentine well and by a pump test conducted by the parties and the Department.

8. In an administrative hearing for an application to amend a permit, the applicant bears the burden of proving that the proposed change will not injure other water rights. If a protestant seeks the protection of *Parker* from application of the reasonable pumping level standard of the Ground Water Act, however, the protestant must come forward with evidence that: (1) the protestant is the holder of a water right that is not subject to the Ground Water Act, and (2) the protestant's diversion works are capable of diverting the water right at the ground water levels existing at or about the time the application is considered. Once the protestant comes forward with the information, the applicant ultimately bears the burden of proving that the amendment will not injure the protestant under the *Parker* standard.

9. Withdrawing ground water from the proposed Eagle well no. 3 is expected to cause a decline in ground water levels in the Chase dairy-domestic well below the level at which

the present diversion works can divert water. As a result, water right no. 63-15820 and claim no. 63-05226 are expected to be adversely affected by approval of the additional point of diversion at the proposed Eagle well no. 3.

10. Withdrawing ground water from the proposed Eagle well no. 3 is expected to cause declines in ground water levels at the location of the Chase small irrigation well. However, Eagle is not required to protect the Chase Estate against declines in ground water levels that occurred prior to the potential construction and operation of Eagle well no. 3. Since the Chase Estate and its predecessors have not diverted ground water from the small irrigation well since 1983, the Director cannot presently determine the adverse effects, if any, that the Chase Estate might incur as a result of the construction and operation of Eagle well no. 3. The Director cannot protect the ground water pumping level for the Chase Estate unless it has information to show that the water right having the small irrigation well as the point of diversion can be exercised at the present ground water level. Eagle should not be enjoined from constructing and operating the proposed Eagle well no. 3 by a claim of injury to a water right that has not been exercised for over 20 years and that may not be divertible with the present ground water levels and diversion works. However, the Chase Estate may conduct a pump test at the small irrigation well using the existing diversion works to demonstrate its existing capacity to divert ground water prior to the operation of Eagle well no. 3. The pump test must be coordinated with Eagle and approved by the Department. Any sustainable diversion of water from the small irrigation well with the existing diversion works at current ground water levels, verified by the pump test, should be protected from injury.

11. Since the proposed Eagle well no. 4 would be located about three-quarter mile further away from the Chase dairy-domestic and small irrigation wells than the proposed Eagle well no. 3, the expected drawdown caused by ground water withdrawals from the proposed Eagle well no. 4 would be substantially less than the drawdown caused by the proposed Eagle well no. 3.

12. Water right no. 63-08663 is diverted through the Chase large irrigation well. The Director concludes that water right no. 63-08663 has a priority date later than applicable amendments to the Ground Water Act, and that water right no. 63-08663 is subject to the reasonable economic pumping level standard. Drawdowns caused by ground water withdrawals from the proposed Eagle well no. 3 or Eagle well no. 4 would not be expected to cause water levels to decline below the reasonable economic pumping level. Water right no. 63-08663 will not be adversely affected by approval, construction, and withdrawals of ground water from the proposed Eagle well no. 3 or Eagle well no. 4.

13. Since the Burton Group did not present sufficient proof of water rights, locations of points of diversion, and ability to divert ground water as authorized under any of the water rights, the individuals within the Burton Group are not entitled to protection against declines in ground water pumping levels in this administrative action.

14. Withdrawing ground water from the proposed Eagle well no. 3 or Eagle well no. 4 will not adversely affect water rights held by the Eagle Water Company or Weldon Fisher.

15. Eagle does not presently own or have legal access to the site proposed for Eagle well no. 4. However, Eagle does have eminent domain authority which could be exercised if necessary to gain access to the site for the proposed Eagle well no. 4.

16. Water rights of the protestants will not be injured by development of the proposed Eagle well no. 4 provided the conditions of this order for the proposed Eagle well no. 3 are satisfied.

Enlargement of Use

17. The Director must determine whether the proposed amendment of permit no. 63-12448 will result in the diversion and use of more water than originally permitted.

18. Eagle will not increase the maximum rate of diversion or annual volume of ground water diverted from the amounts authorized by permit no. 63-12448. The Director should not advance the date of priority for permit no. 63-12448.

Local Public Interest

19. Idaho Code § 202B(3) defines the local public interest as follows:

"Local public interest" is defined as the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource.

20. Eagle submitted sufficient information concerning the proposed Eagle well no. 3 and Eagle well no. 4 to allow the water resource impact of the project to be evaluated. Since the application requests that permit no. 63-12448 be amended only to add additional points of diversion, the only area directly affected by the application is the area within the immediate vicinity of the proposed wells.

21. Eagle's intent to have an independent, municipal, water supply system is in the local public interest.

Extension of Time to File Proof of Beneficial Use

22. Idaho Code § 42-204 states, in pertinent part as follows.

Sixty (60) days before the date set for the completion of the appropriation of water under any permit, the department shall forward a notice to the applicant by certified mail at his address of record of the date for such completion, which said notice shall advise the applicant of the necessity of submitting an affidavit of completion or a request for an extension of time on or before said date; Provided that:

1. In cases where the applicant is prevented from proceeding with his work ... by litigation of any nature which might bring his title to said water in question, the department of water resources upon proper showing of the existence of any such condition, and being convinced that the applicant is proceeding diligently and in good faith, shall extend the time so that the amount of time lost by such delays shall be added to the time given in the original permit . . .

23. The contested case initiated by the protests filed against this application for amendment and a previous application for amendment qualify as "litigation of any nature which might bring ... title to said water in question . . ." Four years of the original development period were lost as a result of the contested applications for amendment. Eagle has proceeded diligently and in good faith. The time for filing proof of beneficial use should be extended until October 1, 2009.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, IT IS HEREBY ORDERED that application to amend permit no. 63-12448 filed by the City of Eagle is GRANTED as follows.

Water right permit no. 63-12448 is amended to allow for two additional points of diversion: one additional point of diversion in the SWSW, Section 4, T4N, R1E, B.M., Ada County, Idaho; and one additional point of diversion in the NESE, Section 4, T4N, R1E, B.M., Ada County, Idaho.

The extension of time requested by the City of Eagle for filing proof of beneficial use, filed by the City of Eagle in November 2003, is APPROVED, and proof of beneficial use is due on or before October 1, 2009.

The priority date for water right permit no. 63-12448 shall remain April 8, 1998, the original priority date of the Permit.

Water right permit no. 63-12448 is conditioned as follows:

- (1) The City of Eagle must compensate the Chase Estate for the loss of production from the dairy-domestic well to the full extent of the diversion rate authorized under water right no. 63-15820 (0.04 cfs) and claim no. 63-05226 (0.13 cfs) caused by diverting ground water from Eagle well no. 3 located in the SWSW, Section 4, T4N, R1E. Two acceptable alternatives for compensation are: (a) constructing a new well for the Chase Estate, installing the necessary pumping equipment, and paying for additional pumping costs; or (b) providing direct back-up service from the City of Eagle's municipal system without additional cost to the Chase Estate. If one of these two alternatives is offered to the Chase Estate by the City of Eagle, the Chase Estate must except the alternative offered. If the Chase Estate does not accept whichever of these two alternatives is offered by the City of Eagle, the Chase Estate is not entitled to protection of its rights. Alternatively, the Chase Estate and

the City of Eagle may negotiate another mutually acceptable alternative for compensation.

- (2) Before construction of Eagle well no. 3 in the SWSW, Section 4, T4N, R1E, is completed and ground water is diverted from Eagle well no. 3, the Chase Estate may conduct a pump test using the small irrigation well. The Department must pre-approve the test, and the City of Eagle must be allowed to participate in the test. The test must use presently in-place pumping equipment and be conducted for a sufficient duration to establish the current sustainable rate of diversion. Any sustainable rate of diversion within the diversion rate limitation of claim no. 63-05229 (0.46 cfs) will be recognized as diversion capacity that will no longer be available because of declines caused by diverting ground water from Eagle well no. 3 in the SWSW, Section 4, T4N, R1E. The City of Eagle must compensate the Chase Estate for any loss of proven, sustainable diversion rate from the small irrigation well. Two acceptable alternatives for compensation are: (a) constructing a new well for the Chase Estate, installing the necessary pumping equipment, and paying for additional pumping costs; or (b) providing direct back-up service from the City of Eagle's municipal system without additional cost to the Chase Estate. If one of these two alternatives is offered to the Chase Estate by the City of Eagle, the Chase Estate must accept the alternative offered. If the Chase Estate does not accept whichever of these two alternatives is offered by the City of Eagle, the Chase Estate is not entitled to protection of its rights. Alternatively, the City of Eagle and the Chase Estate may negotiate another mutually acceptable alternative for compensation.
- (3) Right no. 63-12448 is subject to all prior water rights, including rights held by the Chase Estate as provided in (1) and (2) above.
- (4) The water bearing zone to be appropriated under right no. 63-12448 is from 183 to 602 feet below ground surface.
- (5) Wells at the additional points of diversion authorized shall be constructed in accordance with the rules of the Idaho Department of Water Resources regarding well construction, IDAPA 37.03.09, and the rules of the Department of Environmental Quality for Public Drinking Water Systems, IDAPA 58.01.08.
- (6) The right holder shall install suitable measuring devices approved by the Department at Eagle wells no. 3 and no. 4 and shall annually provide a report to the Department documenting the total volume of ground water diverted annually to the Department.
- (7) Proof of construction of works and application of water to beneficial use shall be submitted on or before October 1, 2009.
- (8) The issuance of permit no. 63-12448 and the granting of amendment does not grant any right-of-way or easement across the land of another.

- (9) Rights no. 63-11413 and no. 63-12017 also have authorized points of diversion from the wells in the SWSW (Eagle well no. 1) and NWSW (Eagle well no. 2), Section 3, T4N, R1E, and the wells in the SWSW (Eagle well no. 3) and NESE (Eagle well no. 4), Section 4, T4N, R1E, B.M.
- (10) Rights no. 63-11413, no. 63-12017, and no. 63-12448, when combined, shall not exceed a total maximum diversion rate of 3.25 cfs and a total annual maximum diversion volume of 1,455 acre-feet.
- (11) The place of use for rights no. 63-11413, no. 63-12017, and no. 63-12448 is within the service area of the City of Eagle municipal water supply system as provided for under Idaho law.
- (12) The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.

IT IS FURTHER ORDERED that pursuant to the Department's Rule of Procedure 740, this is a final order and subject to review by reconsideration or appeal.

DATED this 22nd day of September 2005.



KARL J. DREHER
Director

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 27th day of September, 2005, a true and correct copy of the above and foregoing documents described below were served on the following by placing a copy of the same in the United States mail, postage prepaid and properly addressed to the following:

Document(s) Served: Final Order

Statement of Available Procedures and Applicable Time Limits.

BRUCE SMITH
TAMMY ZOKAN
225 N 9TH ST STE 420
BOISE ID 83701-2720
bms@msblaw.com
taz@msblaw.com

(x) U.S. Mail, Postage Prepaid
(x) E-mail

JIM BURTON
1896 N EAGLE RD.
EAGLE ID 83616

(x) U.S. Mail, Postage Prepaid

WELDON FISHER
546 E BEACON LIGHT RD.
EAGLE ID 83616

(x) U.S. Mail, Postage Prepaid

CHARLES L. HONSINGER
RINGERT CLARK CHARTERED
P. O. BOX 2773
BOISE ID 83702
clh@ringertclark.com

(x) U.S. Mail, Postage Prepaid
(x) E-mail

MOLLY O'LEARY
P. O. BOX 1849
EAGLE ID 83616
molly@richardsonandoleary.com

(x) U.S. Mail, Postage Prepaid
(x) E-mail

JOHN WESTRA
IDWR – WESTERN REGION
2735 AIRPORT WAY
BOISE ID 83705-5082
john.westra@idwr.idaho.gov

(x) U.S. Mail, Postage Prepaid
(x) E-mail



Victoria Wigle
Administrative Assistant to the Director
Idaho Department of Water Resources

(GPH Modified Version)
7/94

For Office Use Only
\$25 Filing Fee
Receipt # W023427
Date 2-5-98

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ASSIGNMENT OF PERMIT

RECEIVED

FEB 05 1998

WATER RESOURCES
WESTERN REGION

The City of Eagle hereby notifies the Department of Water Resources that Lexington Hills, Inc. and Treasure Valley Village, Ltd. ("Grantors") have assigned all their right, title and interest in and to Permit No. 63-12017 to the City of Eagle.

This assignment is evidenced by the copy of the *Special Warranty Deed and Assignment of Permit for Water Right* attached hereto.

Submitted this 4th Day of February, 1998.



Christopher H. Meyer
Givens Pursley & Huntley LLP
277 N. 6th Street, Ste. 200
P.O. Box 2720
Boise, ID 83701-2720
(208) 388-1200
Attorney for City of Eagle

STATE OF IDAHO)
) ss.
County of Ada)

On this 4th day of February, 1998, before me, the undersigned, a Notary Public in and for said State, personally appeared Christopher H. Meyer, known or identified to me to be the person whose name is subscribed to the within and foregoing instrument and further known or identified to me to be an attorney for the City of Eagle, and said person acknowledged to me that he executed the same on behalf of the City of Eagle.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.



Notary Public for Idaho
Residing at Boise, Idaho
My commission expires: 6-6-2003

MICROFILMED

JAN 04 1999

G:\DATA\Clients\30177\IDWR\1998-02-04 Assignment of Water Right.doc

✓ ORIGINAL Forwarded
to S.A.
This cc is for Amendment
appl. file

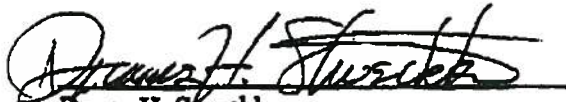
**SPECIAL WARRANTY DEED
AND ASSIGNMENT OF PERMIT
FOR WATER RIGHT**

FOR VALUE RECEIVED, Lexington Hills, Inc. and Treasure Valley Village, Ltd. ("Grantors") do hereby convey, release, remise and forever quitclaim, subject to the special warranty given herein in the following paragraph, unto United Water Idaho, an Idaho corporation, ("Grantee") the following described real property (hereinafter, the "Water Right"), to wit: all our interest in that certain water right to the use of ground water, including storage rights, represented by Water Right Permit No. 63-12017 issued on or about January 24, 1994, as reflected in the records of the State of Idaho, Idaho Department of Water Resources. In addition, Grantors hereby assign to Grantee any and all permits, licenses, decrees, claims, potential claims, contracts, certificates, shares, or other legal evidence or documentation of any interest in said Water Right, including but not limited to any claim which has been or could be asserted with respect to said Water Right in the Snake River Basin Adjudication, Fifth Judicial District, in the State of Idaho, in and for the County of Twin Falls, Case No. 39576.

Grantors specially represent and warrant that they obtained the above referenced Permit for the Water Right in good faith and that they have not at any time conveyed any interest in said Water Right to any person other than the Grantee. Grantors make no further warranty regarding the validity or quantity of the Water Right conveyed by this deed.

IN WITNESS WHEREOF, the undersigned have caused their names to be hereunto subscribed this 4th day of February, 1998.

GRANTORS



Duane H. Stueckle
President
Lexington Hills, Inc.



William R. Guhrke
General Partner
Treasure Valley Village, Ltd.

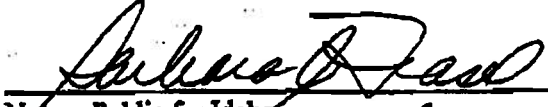
MICROFILMED

JAN 04 1999

STATE OF IDAHO)
) ss.
County of Ada)

On this 4th day of February, 1998, before me, the undersigned, a Notary Public in and for said State, personally appeared Duane H. Stueckle, known or identified to me to be the person whose name is subscribed to the within and foregoing instrument and further known or identified to me to be the President of Lexington Hills, Inc., and said person acknowledged to me that he executed the same on behalf of Lexington Hills, Inc.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

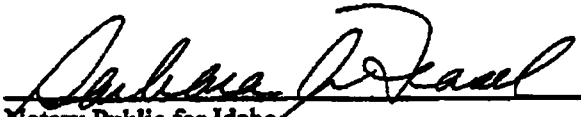


Notary Public for Idaho
Residing at Boise, Idaho
My commission expires: 6-6-2003

STATE OF IDAHO)
) ss.
County of Ada)

On this 4th day of February, 1998, before me, the undersigned, a Notary Public in and for said State, personally appeared William R. Guhrke, known or identified to me to be the person whose name is subscribed to the within and foregoing instrument and further known or identified to me to be the General Partner of Treasure Valley Village, Ltd., and said person acknowledged to me that he executed the same on behalf of Lexington Hills, Inc.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.



Notary Public for Idaho
Residing at Boise, ID
My commission expires: 6-6-2003

G:\DATA\Clients\30177\Docs\1998-02-04 Special Warranty Deed.doc

MICROFILMED

JAN 04 1999

For Office Use Only
\$25 Filing Fee
Receipt # W023427
Date 2-5-98

RECEIVED

FEB 05 1998

WATER RESOURCES
TEAM REGION

This assignment is evidenced by the copy of the *Special Warranty Deed and Assignment of Permit for Water Right* attached hereto.

Submitted this 4th Day of February, 1998.

RECEIVED

FEB 09 1998

Department of Water Resources

STATE OF IDAHO)
) ss.
County of Ada)

On this 4th day of February, 1998, before me, the undersigned, a Notary Public in and for said State, personally appeared Christopher H. Meyer, known or identified to me to be the person whose name is subscribed to the within and foregoing instrument and further known or identified to me to be an attorney for the City of Eagle, and said person acknowledged to me that he executed the same on behalf of the City of Eagle.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public for Idaho
Residing at Base Idaho
My commission expires: 6-6-2003

MICROFILMED
APR 16 1998

State of Idaho
Department of Water Resources

AMENDED

Permit To Appropriate Water

AMENDED

NO. 63-12017

Proposed Priority: April 21, 1993

Maximum Diversion Rate:

1.56 CFS

This is to certify, that **LEXINGTON HILLS INC**

TREASURE VALLEY VILLAGE LTD PARTNERSHIP

1815 E STONEYBROOK CT

EAGLE ID 83616

has applied for a permit to appropriate water from: **GROUNDWATER**

and a permit is **APPROVED** for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
WILDLIFE	01/01 to 12/31	1.56 CFS	
WILDLIFE STORAGE	01/01 to 12/31		15.0 AF
RECREATION	01/01 to 12/31	1.56 CFS	
RECREATION STORAGE	01/01 to 12/31		15.0 AF
AESTHETIC	01/01 to 12/31	1.56 CFS	
AESTHETIC STORAGE	01/01 to 12/31		15.0 AF
DIVERSION TO STORAGE	01/01 to 12/31	1.56 CFS	
	Totals	1.56 CFS	

LOCATION OF POINT(S) OF DIVERSION:

NWSW , Sec. 3, Township 04N, Range 01E
SWSWSW , Sec. 3, Township 04N, Range 01E
SWSW , Sec. 4, Township 04N, Range 01E
NESE , Sec. 4, Township 04N, Range 01E
ADA County

PLACE OF USE: WILDLIFE

TWN RGE SEC

04N 01E 3

SWNE
SWSW
SESE

NESW
SESW

NWSW
NWSE

PLACE OF USE: RECREATION, same as WILDLIFE use

PLACE OF USE: AESTHETIC, same as WILDLIFE use

CONDITIONS/REMARKS:

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before January 1, 1999.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
4. A flow measurement port or other device as specified by the Department shall be installed by the right holder to provide for the installation of measuring equipment and the determination of the rate of diversion by the Department.

RECORDED
FEB 24 1994

State of Idaho
Department of Water ResourcesAMENDED**Permit To Appropriate Water**AMENDED

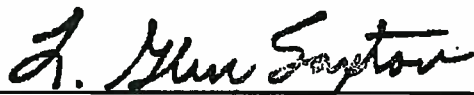
NO. 63-12017

CONDITIONS/REMARKS:

5. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
6. A well drilled pursuant to this permit must be located at least 500 feet from any existing well. Well spacing closer than 500 feet must be approved by the Department of Water Resources.
7. Construction of the well must comply with Idaho well construction standards.
8. The issuance of this right in no way grants any right-of-way or easement across the land of another.
9. Use of water under this right may be affected by an agreement between the protestant and the right holder.
10. Place of use is located within Lexington Hills and Trail Creek Subdivisions.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.
Witness the signature of the Director, affixed at Boise, this

2nd day of February, 1994.


Acting for R. Keith Higginson, Director

RECORDED

FEB 24 1994

Ident. No. 63-12017

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name: LEXINGTON HILLS INC 208-939-6000
Address: 1815 E STONEYBROOK COURT
EAGLE ID 83616

AND

Name: TREASURE VALLEY VILLAGE LTD PARTNERSHIP 208-000-0000
EAGLE ID 83616

2. Source: GROUNDWATER Trib. to:
3. Location of Point of Diversion: NWSW Sec. 3, Township 04N, Range 01E
SWSWSW Sec. 3, Township 04N, Range 01E
SWSW Sec. 4, Township 04N, Range 01E
NESE Sec. 4, Township 04N, Range 01E
ADA County

4. Water will be used for the following purposes:

Purpose	From	To	CFS	(or)	AF
WILDLIFE	01/01	12/31	1.560		
WILDLIFE STORAGE	01/01	12/31			15.00
RECREATION	01/01	12/31	1.560		
RECREATION STORAGE	01/01	12/31			15.00
AESTHETIC	01/01	12/31	1.560		
AESTHETIC STORAGE	01/01	12/31			15.00
DIVERSION TO STORAGE	01/01	12/31	1.560		

5. Total quantity to be appropriated is:
1.560 CFS (and/or) AF

6. Proposed diverting works:

- Description of ditches, flumes, pumps, headgates, etc.
2 EXISTING WELLS, 2 PROPOSED WELLS, PIPELINES TO PONDS & DITCHES
- Height of storage dam N/A feet; active reservoir capacity 15.00
acre-feet; total reservoir capacity 15.00 acre-feet; period of
year when water will be diverted to storage: 1/01 to 12/31 inclusive.
- Proposed well diameter is 16 inches; proposed depth of well is 615
feet.
- Is groundwater with a temperature greater than 85F being sought? NO

7. Time required for the completion of the works and application of
the water to the proposed beneficial use is 5 year(s).

RECORDED

FEB 24 1994

8. Place of Use: WILDLIFE

TWN RGE SEC
04N 01E 3

SWNE
SWSW
SESE

NESW
SESW

NWSW
NWSE

Place of Use: RECREATION, same as WILDLIFE use

Place of Use: AESTHETIC, same as WILDLIFE use

9. a. Who owns the property at the point of diversion?

APPLICANT & RHM COMPANY

b. Who owns the land to be irrigated or place of use?

APPLICANT

c. If the property is owned by a person other than the applicant,
describe the arrangement enabling the applicant to make this filing.
SUBD. COVENANTS & DEVELOPMENT PLANS, PERMISSION OF OTHER OWNERS

10. Remarks:

Recreation, Wildlife, and Aesthetic uses are for a water amenity
in Lexington Hills and Trail Creek Subdivisions.
Consumptive use of water in this right will be supplied by
reducing the number of irrigated acres in right no. 63-11413.

11. Map of proposed point of diversion and place of use attached? []

BE IT KNOWN that the undersigned hereby makes application for permit to
appropriate the public waters of the State of Idaho as herein set forth.

Applicant

Received by _____ Date _____ Time _____ Preliminary check by _____

Fee \$ _____ Receipted by _____ # _____ Date _____

Publication prepared by _____ Date _____ Published in _____

Publication approved _____ Date _____

RECORDED

FEB 24 1994

See Comments

GIVENS PURSLEY LLP

RECEIVED

FEB 25 1999

Department of Water Resources

LAW OFFICES

277 North 8th Street, Suite 200
PO Box 2720, Boise, Idaho 83781

TELEPHONE 208 388-1200

FACSIMILE 208 388-1201

DIRECT DIAL: (208) 388-1238
EMAIL: chm@givenspursley.com

Gary B. Allen
Christopher J. Boeson
Michael C. Creamer
Thomas E. Dvorak
Roy Lewis Esguren
Jeffrey C. Feraday
L. W. Grant III
Richard W. Jankowski
Karl T. Klein
David R. Lombardi

Kimberly D. Maloney
Kenneth R. McClure
Cynthia A. Melillo
Christopher H. Meyer
L. Edward Miller
Patrick J. Miller
Jadeen B. Montgomery
Aaron H. Nemeo
W. Hugh O'Riordan
Kenneth L. Pursley

Conley Ward
Steven R. Weeks
Stephanie C. Westermarck
Robert B. White

Raymond D. Givens
James A. McClure
OF COUNSEL

February 24, 1999

Mr. L. Glen Saxton
Chief, Water Allocation Bureau
Idaho Department of Water Resources
1301 N. Orchard St.
P.O. Box 83720
Boise, ID 83720-0098

Re: City of Eagle Water Right Applications
IDWR Water Right No. 63-12017 (1993 amenity)
Our File No. 30-77

Dear Mr. Saxton:

I am in receipt of your letter of February 8, 1999 notifying the City that the above-captioned permit has lapsed.

This is to advise that the water right has been fully developed and City of Eagle will be providing the required proof to the Department as soon as possible. Ed Squires of United Water Idaho / EM² will be acting on the City's behalf in this regard.

It is my understanding that the City has until April 9, 1999 to submit its proof and have the permit reinstated. It is also my understanding that we do not need to file a request for an extension, so long as we meet the April 9, 1999 deadline. Please advise if this is not correct.

Ed Squires will be following up directly with appropriate IDWR staff to coordinate with respect to the field examination and submission of proof. Please call me if you have any questions or concerns.

MICROFILMED

AUG 09 1999

Mr. Jim J. Johnson
February 24, 1999
Page 2

Sincerely,


Christopher H. Meyer

cc: David H. Bieter, Counsel to the City of Eagle
Steve Lester, Idaho Department of Water Resources
Ed Squires, United Water Idaho

CHM:baf

S:\Client\30\77\Corr\1999-02-24 CHM Ltr to G.Saxton - Re Lapse Notice.wpd

MICROFILMED

AUG 09 1999



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 327-7900 FAX: (208) 327-7866

July 2, 1999

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

City of Eagle
310 E State St
Eagle ID 83616

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 63-12017

Dear Permit Holder:

The department acknowledges receipt of the proof of beneficial use form submitted for the above referenced permit.

Enclosed is an order reinstating the permit since proof was submitted after the proof due date. Note that the priority date has been advanced to July 27, 1993, as provided in Section 42-218a.2, Idaho Code.

Please be advised that Section 42-248, Idaho Code, requires you or the owner of this water right to maintain current ownership and address records on file with the department. Forms to file a change of ownership of a water right and/or a change in the address of the water right owner are available from any department office.

The next step in the process of developing a water right is for the department to conduct a field examination to determine and confirm the use being made of the water. If you have questions concerning the field examination, please contact the WESTERN Regional Office of the department in Boise at (208)334-2190.

Sincerely,

JULIE L. YARBROUGH, Administrative Assistant
Water Allocation Bureau

Enclosure

c: IDWR - Region

MICROFILMED

AUG 09 1999

IN THE MATTER OF PERMIT NO. 63-12017) **ORDER OF**
)
IN THE NAME OF CITY OF EAGLE) **REINSTATEMENT**
)

AUG 09 1999

GIVENS PURSLEY LLP

LAW OFFICES
777 North 8th Street, Suite 200
PO Box 2224, Boise, Idaho 83701
TELEPHONE: 208 388-1208
FAX: 208 388-1201

DIRECT DIAL: (208) 388-1235
EMAIL: chm@givenspursley.com

Gary S. Allen
Christopher J. Benson
Michael C. Dwyer
Thomas E. Dwyer
Wayne L. Egan
Jeffrey C. Frazier
L. W. Grant III
Richard W. Jankowski
Karl T. Koss
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Patrick J. Miller
Justin H. Montgomery
Ramon S. Neal
Aron H. Nemes
W. Hugh O'Brien

Kenneth L. Patsley
Gregory J. Voss
Carley Ward
Steven R. Woods
Stephanie C. Woodruff
Raymond D. Steyn
James A. McClure

November 19, 1998

Mr. Jim J. Johnson
Manager
Water Rights Permits
Idaho Department of Water Resources
1301 N. Orchard St.
Statehouse Mail
Boise, ID 83720-9000

Re: City of Eagle Water Right Applications
IDWR Water Right No. 63-12448 (1998 municipal),
IDWR Water Right No. 63-12017 (1993 amenity),
IDWR Water Right No. 63-11413 (1991 domestic)

Our File No. 30-77

Dear Jim:

We spoke yesterday about the status of the three applications identified above. At that time, I promised you a letter, on behalf of the City of Eagle, confirming our discussions. The purpose of this letter is to resolve issues which apparently have delayed Departmental action on these applications. It is our hope that with these issues resolved the Department will be in a position to act immediately with respect to each of the above applications.

Amenity Right (63-12017)

You indicated that the Department has some concern about whether this water right can be converted to a municipal right without enlargement or expansion. It was certainly not the intention of the City of Eagle to expand or enlarge this right, and I remain convinced that expansion or enlargement could be avoided through proper

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Mr. Jim J. Johnson
November 19, 1998
Page 2

conditions.¹ However, we do not want the Department's concerns over this right to hold up processing of the other more pressing applications.

Consequently, the City of Eagle hereby withdraws its application for amendment of Water Right No. 63-12017. This withdrawal simply means that the City may continue to use the water for water amenity purposes as described in the existing permit. If, in the future, it becomes apparent that additional flexibility in the use of this water right is important, the City may file a new application for amendment.

1998 Permit Application (No. 63-12448)

Apparently there has been some confusion regarding the intent and purpose of this application.

First, you pointed out that it is counter-intuitive that the City has applied for a municipal water right with a built-in volume limitation. I readily acknowledge that this limitation is not typical of a municipal right. The reason for the limitation is that it reflects an agreement worked out prior to filing between the City of Eagle (the "City") and United Water Idaho ("UWID").

The City and UWID are in a cooperative mode in connection with the supply of water in this area. They wish to avoid any potential problems or disputes in the future with respect to well interference. At least one of the points of diversion owned by the City is sufficiently close to the Floating Feather Well owned by UWID to raise such concerns. In order to avoid conflicts before the Department (either at the application stage or at the time of regulation), the City and UWID worked out an understanding in advance which made the City's 1998 Application (No. 63-12448) senior to UWID's 1998 application for Floating Feather (No. 63-12452), but limited the City's 1998 water right to no more than 1,455 acre-feet per annum when used in combination with its existing rights (Nos. 63-11413 and 63-12077).²

¹For instance, we have included 45 acre-feet per annum of additional "amenity" water in the calculation described below for the 1998 water right. It would seem that the 1993 amenity right could be similarly quantified.

²I should note that the City and UWID worked out this compromise on their own,
(continued...)

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The parties have proceeded on the basis of the City's application which contained this limitation. On this basis, UWID filed no objection to (and has supported) the City's application. Consequently, it is essential that the Department include this annual volumetric limitation in the 1998 permit.

I also wish to underscore that both the flow and volume limitations in the 1998 application are intended to operate in conjunction with the other two rights now owned by the City (63-11413 and 73-12017). Thus, the 3.25 flow limit and the 1,455 acre-foot per annum limit are intended to be cumulative limits for all three water rights.

We attached to the application a document labeled "Attachment B, City of Eagle - 1998 Water Right Application - Calculation of Diversion Rate and Annual Volume Requirements for 1800 Homes with Water Amenities." The purpose of this attachment was to explain how the 3.25 flow limit and the 1,455 volume limit were calculated. Both numbers are based on estimates of the amount of water believed necessary to serve a total of 1,800 homes.

In contrast to the 1991 domestic right (No. 63-11413), however, we did not want to quantify the limit in terms of a number of homes. Rather than argue later about how much water 900 (or 1,800) homes should use, we decided to bite the bullet now and do the quantification at the permit application stage. Thus, in the future, in order to administer this water right, there will be no need to count homes in Eagle, no need to argue about what structures and living arrangements constitute an additional "home," and no need to argue about how much water that many homes ought to use. Rather, if this permit is issued, the City of Eagle will be entitled to pump at a maximum instantaneous flow of 3.25 and up to 1,455 acre-feet per year, and the City may use the water for any municipal purpose, whether that be homes, schools, stores or what have you.

Thus, we ask that the Department issue the permit with a single set of flow and volume limitations (3.25 cfs and 1,455 acre-feet per year), without linking this back to number of homes or other factors.

²(...continued)

without any representation from me. My role in representing the City has been limited to the implementation of this agreement in the form of the three water right applications now before the Department.

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Mr. Jim J. Johnson
November 19, 1998
Page 4

Attachment B to the application displays two sets of flow and volume requirements. One assumes that the 550 future (not yet planned) homes will need to be irrigated out of this right. The other assumes that the 550 future homes will be irrigated with surface water acquired separately. We have used the more conservative assumption (that irrigation needs will need to be met for the 550 new homes out of the 1998 right) in arriving at the flow and volume numbers reflected on the application. The smaller numbers are supplied only in the event that the Department feels compelled to issue the permit with alternative conditions (with and without irrigation). We believe it makes better sense, however, simply to issue the permit with the higher numbers, and let the City prove up depending on how events unfold.

Finally, I note that the calculation in Appendix B shows a flow rate of 3.23 cfs. This was rounded up slightly to 3.25 on the application. The slightly higher number should also accommodate the small amenity flow included within the calculation. The 3.25 flow number coincidentally equals the flow number on the original 1991 permit (which was later reduced to 3.15 cfs to accommodate the amenity water). Thus, the 1998 right will have very little impact on the flow rate, but will substantially increase the annual volume which may be pumped from the four points of diversion.

Transfer of 1991 Domestic Right (No. 63-11413)

I understand that the Department intended to quantify the "900 homes" limitation in this right on the basis of a calculation similar to that set out in Attachment B to the 1998 Application. Specifically, since the right, as permitted, allows for irrigation only when surface water is unavailable, the Department applied the lower volume assumption of 0.6 acre-foot-per-year-per-home (rather than 1.2 acre-feet, used when lawn irrigation is involved). This factor, times 900 homes, yields 540 acre-feet per annum.

We are comfortable with this calculation, and urge the Department to approve this transfer at once.

In closing, thank you again for your help in bringing this application process to a successful conclusion.

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JAN 04 1999

Mr. Jim J. Johnson
November 19, 1998
Page 5

Sincerely,

Christopher H. Meyer

cc: The Honorable Rick Yzaguirre, Mayor of Eagle
David H. Bieter, Counsel to the City of Eagle
Ed Squires, United Water Idaho
Katherine Shiflet, United Water Idaho
Dan Brown, United Water Idaho
JoAnn C. Butler, Spink & Butler

CHM:baf

S:\CHM\30777\Corr\1998-11-19 CHM Ltr to J.Johnson - Re explanation of application.wpd

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JAN 04 1999

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OCT 23 1998

Department of Water Resources

MEMORANDUM

To: File nos. 63-11413 & 63-12017 (amendment); 63-12448 (new application)
in the name of the City of Eagle
From: Gary Spackman *Shy*
Date: October 16, 1998

Re: Analysis of Applications

This memorandum analyzes three related applications pending with the department: Two applications to amend permit nos. 63-11413 & 63-12017, and application for a new water right no. 63-12448.

Application for permit no. 63-11413 was the initial filing for the Lexington Hills subdivision. It was sharply contested by some of the existing ground water users located in the area of Highway 55 and Floating Feather Road. The developer was allowed to drill a well and pumped it for several weeks while monitoring several wells in the area. The pump test showed a direct hydraulic connection between the Lexington Hills well and other wells in the area. IDWR concluded that ground water availability was limited in the area near the intersection of Floating Feather Road and Highway 55, but that ground water availability increased at locations farther west. Permit no. 63-11413 was conditioned to limit ground water withdrawal, require retention of surface water rights, and require flow measurement and water metering.

Permit no. 63-11413 authorized four points of diversion. Two points of diversion were located on Lexington Hills property in Section 3, T4N, R1E. Two points of diversion were authorized on property owned by Hormachea in Section 4, T4N, R1E. The two Lexington Hills wells were constructed and are now operating. The wells on the Lexington Hills property were purposely located as far west as possible to reduce the effect on water users east of the subdivision. The permit holders wanted to drill wells on the Hormachea property because the wells were located to the west and should intercept more abundant water supplies. This is particularly true of the proposed well at the northeast corner of Floating Feather Road and Eagle Road. The Hormachea wells are not presently constructed. No more than 900 homes could be served by permit no. 63-11413.

Permit no. 63-12017 authorized use of ground water for aesthetics, wildlife, and aesthetics & wildlife storage from the same points of diversion authorized by permit no. 63-11413. The permit was issued to maintain water levels in the ponds of Lexington Hills subdivision when surface water from Farmer's Union Canal is not being delivered.

Application for water right no. 63-12448 seeks additional water to serve additional homes beyond those authorized by permit nos. 63-11413 & 63-12017. The water will be diverted from the four points of diversion identified by permit nos. 63-11413 & 63-12017.

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JAN 04 1999

RECOMMENDATIONS

Amendment to Permit No. 63-11413

I recommend IDWR approve application to amend permit no. 63-11413 with the conditions of approval of the original permit. Because the right is being amended to a municipal right, the 900 home limitation is no longer an enforceable restriction. Instead, withdrawals from the well should be limited to the volume necessary for in-house use in 900 homes. I recommend limiting diversion from the two Lexington Hills wells (or any replacement wells) to 1.9 cfs and 180 acre feet under this right, plus an additional 22.5 acre feet for the water flows in the Lexington Hills Ponds authorized by permit no. 63-12017 (based on five acres taken out of production as stated in the file), for a total of 202.5 acre feet annually.

Amendment to Permit No. 63-12017

I recommend IDWR not approve application to amend permit no. 63-12017 to change the nature of use to municipal. The water was appropriated to maintain levels in specific ponds during the minimal evaporative months of the year. The permit should not receive municipal status because the change would allow for enlargement of the right. Only if very strictly conditioned could enlargement be prevented.

Application for Water Right No. 63-12448

I recommend IDWR approve application no. 63-12448. Eleanor Chase raised some concern about the effect of further ground water withdrawals on her earlier water rights. The applicant provided me with copies of groundwater level data for three wells in the area showing stable ground water levels, even though both the Crandlemire well (located approximately one-quarter mile west of the Eagle Rd. - Floating Feather Rd. intersection) and the Lexington Hills well have been pumping for the last 4-5 years. It appears there is sufficient ground water for the use proposed.

I recommend the same conditions as placed on permit nos. 63-11413 & 63-12017 that describe measurement, data reporting, well spacing, mitigation to other water users etc. Surface water appurtenant to the land should be delivered for irrigation of the residential lots. The requirement for mitigation for anadromous fish should also be included. Any wells must be constructed according to IDWR well construction standards. I also recommend the following condition:

Prior to diverting water under this permit, the water right holder shall locate the existing wells within one quarter mile of the proposed well near the intersection of Floating Feather Rd. -

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JAN 04 1999

City of Eagle Memorandum
Page 3

Eagle Rd., and shall measure water levels semiannually in one of the wells for ten years after the permit holder's well is constructed. The monitoring well shall be selected based on depth, proximity, and permission to monitor from other landowners. This condition can be waived if the water right holder cannot find a suitable well for monitoring or cannot gain access to a suitable well in the area.

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[Close](#)

IDAHO DEPARTMENT OF WATER RESOURCES
Water Permit Report

10/10/2005

WATER RIGHT NO. 63-12448

<u>Owner Type</u>	<u>Name and Address</u>
Current Owner	CITY OF EAGLE PO BOX 1520 EAGLE, ID 83616 (208)939-6813

Priority Date: 04/08/1998

Status: Active

<u>Source</u>	<u>Tributary</u>
GROUND WATER	

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
MUNICIPAL	01/01	12/31	3.25 CFS	1455 AFA
Total Diversion			3.25 CFS	

Location of Point(s) of Diversion:

GROUND WATER	NWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SESW	Sec. 05	Township 04N	Range 01E	ADA County

Place(s) of use: No POUs found for this right

Conditions of Approval:

1.	065	The right holder shall use the full allotment of appurtenant surface water rights in conjunction with ground water diverted under this right and shall only divert ground water under this right when water from the appurtenant surface water rights cannot be delivered to the right holder.
2.	101	This right shall not be used if the surface water right(s) appurtenant to the place of use is sold, transferred, leased or used on any other place of use.
3.	01M	After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
4.	046	Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
5.	004	The issuance of this right does not grant any right-of-way or easement across the land of another.
6.	121	The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.
7.	X35	Rights 63-11413, 63-12017, and 63-12448 when combined shall not exceed a total diversion rate of 3.25 cfs and a total annual maximum diversion volume of 1455.0 af.
8.		Points of diversion locally known as City of Eagle Wells #1 and 2, and Floating Feather Well.
9.	124	Place of use is within the city limits of Eagle and surrounding service area.
10.		Rights 63-11413 and 63-12017 are also diverted from the wells located in the NWSW and SWSW, S3, T4N, R1E.
11.		Water bearing zone to be appropriated is from 183 to 602 feet.

Dates:

Proof Due Date: 10/01/2009

Proof Made Date:

Approved Date: 12/03/1998

Moratorium Expiration Date:

Enlargement Use Priority Date:

Enlargement Statute Priority Date:

Application Received Date: 04/08/1998

Protest Deadline Date: 07/09/2001

Number of Protests: 4

Field Exam Date::

Date Sent to State Off:

Date Received at State Off:

Other Information:

State or Federal:

Owner Name Connector:

Water District Number:

Generic Max Rate per Acre:

Generic Max Volume per Acre:

Seven Falls Trust or Nontrust:

Seven Falls Dismissed:

DLE Act Number:

Cary Act Number:

Mitigation Plan: False

Close

GIVENS PURSLEY LLP

RECEIVED

AUG 30 2000

Department of Water Resources

LAW OFFICES
277 North 6th Street, Suite 200
PO Box 2720, Boise, Idaho 83701
TELEPHONE: 208 388-1200
FACSIMILE: 208 388-1300

DIRECT DIAL: (208) 388-1238
EMAIL: chm@givenspursley.com

Gary G. Allen
Christopher J. Benson
Michael C. Creamer
Thomas E. Dvornak
Roy Lewis Eiguren
Jacqueline M. Fernalda
Jeffrey C. Forsday
Richard W. Jankowski
Amanda L. Keating
Karl T. Klein
Debra K. Kristensen

Franklin G. Lee
David R. Lombardi
Kimberly D. Maloney
John M. Marshall
Kenneth R. McClure
Kelly Greene McConnell
Cynthia A. Melillo
Christopher H. Meyer
L. Edward Miller
Patrick J. Miller
Audrey B. Montgomery

Angela K. Nelson
W. Hugh O'Riordan
Kenneth L. Pursley
Virginia L. Sadot
Conley Ward
Stephanie C. Westemeier
Robert B. Wolfe

Raymond D. Givens
James A. McClure
OF COUNSEL

August 28, 2000

Mr. Jeff Peppersack
Manager
Water Rights Permits Section
Idaho Department of Water Resources
1301 N. Orchard St.
Statehouse Mail
Boise, ID 83720-9000

Re: City of Eagle Water Right Nos. 63-11413, ~~63-12017~~, 63-12448
Our File No. 5721-1

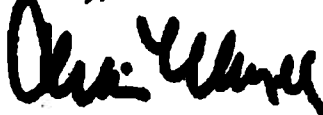
Dear Jeff:

I am writing to advise the Department that I serve as special attorney of record for water matters for the City of Eagle. Please make appropriate entries in the Department's records to reflect this on each of the above-captioned water rights.

I understand that, once I am so listed, both the City and I will be contacted in the event the Department engages in any communications regarding the City's water rights.

I thank you for your attention to this matter. Please do not hesitate to call me if you have any questions.

Sincerely,



Christopher H. Meyer

cc: Honorable Rick Yzaguirre, Mayor
Susan E. Buxton, Esq., Counsel to the City
Scott Rhead, United Water Idaho
Dan Brown, United Water Idaho

CHM:kdt S:\CLIENTS\5721\1\Corr\2000-08-28 CHM Ltr to Jeff Peppersack - Re attorney of record.wpd

NOTE



Water Right Number - 63-12017
 Prefix Translation: WATER RIGHT
 Old (D) Number -

+ - - - - Last Name - - - + + - - - - First Name - - - + + - - - - Address - - - - - +

*** C - CURRENT OWNER ***
 CITY OF EAGLE

*** D - ORIGINAL OWNER ***
 LEXINGTON HILLS INC

1 - C/O GIVENS PURSLEY & HUNTLEY
 2 - PO BOX 2720
 3 -
 City- BOISE State- ID Zip- 837012720
 Phone - 208-388-1200

1 - 1815 E STONEYBROOK CT
 2 -
 3 -
 City- EAGLE State- ID Zip- 83616
 Phone - 208-939-6000

1 - 1815 E STONEYBROOK CT
 2 -
 3 -
 City- EAGLE State- ID Zip- 83616
 Phone - 208-939-6000

+ - - Priority Date - - + + - - - Region - - - + + - - - Stage - - - + + - - - Status - - - +
 04/21/1993 14 WESTERN P - PERMIT

+ - - - - Source - - - - - + + - - - - Tributary - - - - - +
 GROUNDWATER

+ - - - - Point of Diversion - - - - - Diversion Name - - - - - Diversion Rate - - - - - Diversion No.

04N 01E 3 NW SW (1) ADA
 SW SW (1) ADA
 4 SW SW (1) ADA
 NE SE (1) ADA

+ - - - - Water Use - - - - - Diversion Rate - - - - - Diversion Volume

Code Description Period From Period To Diversion Rate Diversion Volume

16 - WILDLIFE 01/01 12/31 1.560 15.00
 17 - WILDLIFE STORAGE 01/01 12/31 1.560 15.00
 46 - RECREATION 01/01 12/31 1.560 15.00
 47 - RECREATION STORAGE 01/01 12/31 1.560 15.00
 52 - AESTHETIC 01/01 12/31 1.560 15.00
 53 - AESTHETIC STORAGE 01/01 12/31 1.560 15.00
 55 - DIVERSION TO STORAGE 01/01 12/31 1.560 15.00

+ - - Total Div. Rate - + + - - Total Div. Volume - + + - - Total Div. Capacity - + + - - Total Consumptive Use - + + - - KW Usage - +
 1.560 0.0

+ - - - - Place of Use - - - - - Description - - - - - County

Twn Rng Sec Tract Lot Acres Code Description County

04N 01E 3 SW NE 16 WILDLIFE (1) ADA

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 AUG 09 1999

Water right number - 63-12017

Prefix Translation: WATER RIGHT

Town	Rng	Sec	Tract	Lot	Acres	Place of Use	Description	County
04N	01E	3	NE SW			16	WILDLIFE	(1) ADA
04N	01E	3	NW SW			16	WILDLIFE	(1) ADA
04N	01E	3	SW SW			16	WILDLIFE	(1) ADA
04N	01E	3	SE SW			16	WILDLIFE	(1) ADA
04N	01E	3	NW SE			16	WILDLIFE	(1) ADA
04N	01E	3	SE SE			16	WILDLIFE	(1) ADA

- - - Diversion Means -

- - - Non-Irrigation Use -

- - - Other Rights for Same Use -

----- Remarks -----

6EN Place of use is located within Lexington Hills and Trail Creek subdivisions.

----- Old Water Right Numbers -----
No Old Water Right Numbers found.

----- Conditions of Approval -----

- 26A - Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
- 01C - A flow measurement port or other device as specified by the Department shall be installed by the right holder to provide for the installation of measuring equipment and the determination of the rate of diversion by the Department.
- 046 - Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
- 46A - A well drilled pursuant to this permit must be located at least 500 feet from any existing well. Well spacing closer than 500 feet must be approved by the Department of Water Resources.
- 46B - The right holder shall comply with Idaho well construction standards when constructing a well pursuant to this right.
- 004 - The issuance of this right does not grant any right-of-way or easement across the land of another.
- 020 - Use of water under this right may be affected by an agreement between the protestant and the right holder.

----- Decree Plaintiff -----

----- Decree Defendant -----

----- Decree Date -----

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AUG 09 1999

Water right number - 63-12017

Prefix Translation: WATER RIGHT

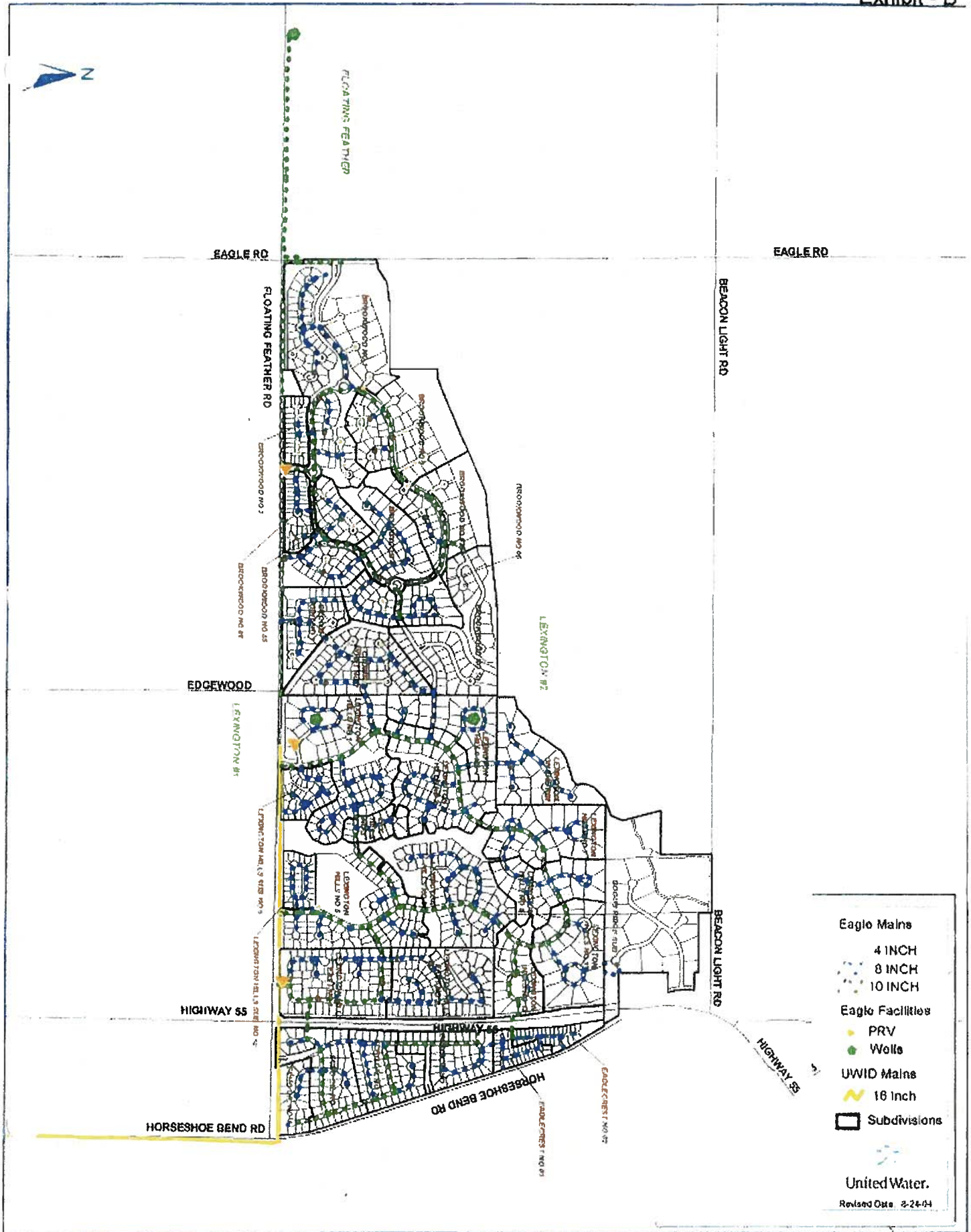
+ - - - - - Comments - - - - - +
Date: 05/12/1993 User Id: LESTER Subject: SHAKE RIVER MORATORIUM & OTHER INFORMATION
Application requested to be exempted from moratorium by reducing acres irrigated by right no. 63-11413 (same system but other uses). Advertisement will contain information from "Remarks" to let people in impact area know intent of application.
Water from Farmers Union Canal will fill ponds during most of the summer. Ponds will be an integral part of irrigation system.
Well #1 in SHSWSW S.3, well #2 in MUSW S.3, well #3 in WISE S.4, well #4 in SHSWSW S.4.
This application results from a dept. investigation of a complaint filed by Mr. Al Thornton of Sage Acres Sub. (east of Hwy. 55) - complaint filed late 1992, field inspection made on 12-31-92 by SL. File 63-11413 has information about this process.
Date: 01/04/1994 User Id: ZIMMERMAN Subject: MORATORIUM EXEMPTION
This permit is located within the Boise River Drainage Moratorium boundary; however, its uses are within the acceptable parameters of the Moratorium guidelines.
Date: 01/04/1994 User Id: ZIMMERMAN Subject: DIVERSION DESCRIPTION
Total of 4 wells; 2 existing wells are 16" by 415' & 615' deep; capacity 10 AF; total reservoir capacity 15 AF.
Date: 01/04/1994 User Id: ZIMMERMAN Subject: P/O & P/O OWNERSHIP
The points of diversion located within SHSWSW, S03, T04M, R01E are owned by the applicant.
The points of diversion located within MUSW, S03, T04M, R01E are owned by RRM Company who have given right of way permission.
The places of use are owned by both the applicant and individual lot owners.
Date: 01/11/1994 User Id: ZIMMERMAN Subject: CORPORATE OFFICERS
The officers and directors of Lexington Hills Inc. are
Bert Bradley, Vice-President;
Bryce L Peterson, Director;
Dennis Whitmore, Secretary/Treasurer;
The partners of Treasure Valley Village Ltd. are
Date: 02/08/1999 User Id: JYANOROU Subject: Lapse Notice Sent
Lapse Notice Sent
Duane H Stueckle, President;
Harvey Neef, Director;
David Roylance, Director;
Steve Yates, Assistant Secretary/Treasurer.
William R Gahrke, Martin S Greene, and Laurence S Greene.

+ - - - - - Water Rights Dates and Flags Area - - - - - +
+ - - - - - Audit Fields - 05/12/93 LESTER 06/14/93 TAYLOR 09/27/93 TAYLOR 01/03/94 TAYLOR 01/04/94 ZIMMERMAN
01/04/94 ZIMMERMAN 01/11/94 ZIMMERMAN 02/02/94 ZIMMERMAN 02/02/94 ZIMMERMAN 04/16/98 KTOJENSEN
02/08/99 COMMENTS

Proof Due Date	01/01/1999	Field Exam Made	09/09/0000	Field Exam Fee	-
Approved/Denied	-	01/24/1994	00/00/0000	Shaw Falls	- B
Proof Made Date	-	00/00/0000	00/00/0000	Temporary Right	- P
Exam to S.O. Date	-	00/00/0000	00/00/0000	OLE/Carey Act	-
Order Show Cause	-	00/00/0000	00/00/0000	Water District	- 63
Licensed Date	-	00/00/0000	00/00/0000	Transfer/Amended	-
Presumption Flag	-	00/00/0000	00/00/0000	POU Ownership Flag	- N
SRBA Decreed Flag	-	00/00/0000	00/00/0000		

MICROFILMED
AUG 09 1999

APPENDIX B
Operating Contract
“To & Through” Agreement
Fire Flow Agreement
System Inventory Detail



United WaterRECEIVED & FILED
CITY OF EAGLE

DEC 02 2004

File: _____

Route to: _____

United Water Idaho Inc.
8248 W. Victory Road
P.O. Box 180420
Boise, ID 83709-4185
telephone 208 362 7300
facsimile 208 362 1479

December 2, 2004

Mr. Mike McCurry
Eagle City

Subject: Water facility inventory

Dear Mr. McCurry:

You requested the information we have on the materials in the Eagle water system. We do not have the valves by size only the total number.
The following is the information we have:

Mains:

2in.	91 ft.
4in.	5,824 ft.
6in.	17,681 ft.
8in.	37,621 ft.
10in.	15,045 ft.
12in.	23,051 ft.

Valves: 403

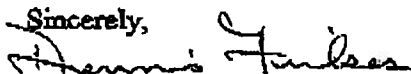
Fire Hydrants: 138

Blow offs: 76

Sample Stations: 5

Camille Cogar will be sending you a map with the locations of the sample stations. If there is anything else I can help you with please do not hesitate to call.

Sincerely,


Dennis Fickes



ptc
Eagle Meter
Count

United Water Operations
Eagle

RECEIVED & FILED CITY OF EAGLE
DEC 02 2004
File: _____
Route to: _____

Date	Meter Size	Number	Total Meters
9/14/2004	3/4"	1090	
	1"	155	
	2"	5	
	3"	1	
			1251
10/12/2004	3/4"	1093	
	1"	155	
	2"	5	
	3"	1	
			1254
11/23/2004	3/4"	1095	
	1"	157	
	2"	5	
	3"	1	
			1258

**Inventory
Lexington Hills #1**

- 1-Gould submersible pump model 6CHC 250 gpm
- 1-Franklin 30 hp motor model 2366169020 460 volts 39.5 amps 3 phase 60 cycle
- 1-Crown submersible pump model BL-600-4 600 gpm
- 1-75 hp sub motor 460 volt 540 gpm at 420 tdh
- 1-Cla-Val 100-02 Powertrol Pump Control Valve
- 1-Apco 6 inch globe check valve
- 1-Flomatic wafer check valve
- 1-6 inch flow meter ABB 10DX3311G
- 1-3 inch flow meter ABB 10DX3311G
- 1-Danfoss variable frequency drive VLT 5075 for 75 hp
- 1-Danfoss variable frequency drive VLT 3532 for 30 hp
- 1-security system with motion sensor
- 1-electrical panel
- 1-phosphate system
- 1-chlorine injection system
- 1-emergency wash station
- 1-electric heater
- 1-fire extinguisher
- 1-UW RTU

Lexington Hills #2

- 1-Crown submersible pump model BL-600-4
- 1-75 hp sub motor 460 volt 540 gpm at 420 tdh
- 1-valve matic check valve
- 1-4 inch cla-val control vent valve
- 2-mccrometers
- 1-pressure tank
- 1-Baldor (no good)
- 1-starter panel
- 1-electrical panel
- 1-electric heater
- 1-gate valve
- 1-joint

AGREEMENT

This Agreement is made this 2nd day of December 1997, by and between the City of Eagle, an Idaho municipal corporation (herein called "City"), and United Water Idaho Inc., an Idaho corporation (herein called "UWID").

RECITALS

A. City is the owner of a municipal, domestic water transmission and distribution system in the City of Eagle (hereinafter called the "System"). The geographical boundaries of the System are shown on Exhibit A, attached hereto and made a part hereof, which geographical boundaries of the System may be amended by the City from time to time.

B. UWID is engaged in the business of owning, operating and managing a potable water systems, and delivering potable water. UWID owns and operates a potable water reservoir commonly known as the Hidden Hollow reservoir (the "Reservoir").

C. City desires to have UWID provide such emergency back-up water to City and UWID desires to provide emergency back-up water to City.

D. Conveyance of emergency back-up water to City from the Reservoir will require that UWID convey potable water to and through the System. City desires to have UWID convey such emergency back up water to City from the Reservoir to and through the System.

NOW, THEREFORE, in consideration of the recitals above which are incorporated below, the mutual terms, conditions, covenants and agreements contained herein, the parties hereto agree as follows:

1. In consideration of conveyance of emergency back-up water to City from the Reservoir, City hereby grants to UWID, and to its successors and assigns, the exclusive right and privilege, for a period of thirty (30) years from the first day following the hereof, to convey potable water to and through the System, all subject to the terms and conditions hereinafter specified.

2. The System shall be constructed and at all times maintained in good order and condition and in accordance with standard engineering practices and all applicable safety codes and lawful governmental regulations, including all applicable local, state, and federal regulations.

3. UWID shall at all times indemnify and hold City, its officers, employees and agent, harmless from any and all expenses or liability arising from or by reason of any negligent act or omission of UWID, its agents or employees, in conveying water to and through the System.

4. Before UWID shall have any rights hereunder, UWID shall file with City Clerk a certificate of insurance evidencing general liability insurance which covers claims for bodily injury, property damage and personal injury. Such insurance shall have minimum limits of \$1,000,000 per occurrence. City of Eagle shall be named as an additional named insured under UWID's insurance policy. Should the minimum limits of insurance as set forth herein be increased above \$1,000,000, pursuant to the Idaho Tort Claims Act (Idaho Code Section 6-901, et. seq.) or any similar legislation, UWID shall, upon City's request, be required to provide City with a new certificate of insurance evidencing such higher limits.

5. This Agreement shall at all times be subject to all rules, regulations and orders that may be lawfully prescribed by the IPUC or by any other governmental authority now or hereafter having jurisdiction over such matters.

6. City and UWID acknowledge that delivery of water other than water controlled by City and/or UWID is undesirable and agree that City shall not grant a permit, license or other agreement for the use of the System to another water service provider during the term of this Agreement.

7. In the event of an amendment to the laws, rules or regulations of City, the State of Idaho, or the IPUC applicable to this Agreement, or for periodic review of any section of this Agreement, the terms of this Agreement and the rights and privileges hereby conferred may be changed, altered, amended, or modified upon mutual agreement between City and UWID to carrying out the intent of this Agreement. In all cases, sixty (60) days notice shall be required on the part of City or UWID to reopen the Agreement pursuant to this section.

8. Sale, assignment, lease or other transfer of this Agreement by UWID may occur only subsequent to notification to City. Sale of the System by City shall be subject to the terms of this Agreement.

9. GENERAL PROVISIONS.

a. All notices, demands, requests, and other communications under this Agreement shall be in writing and shall be deemed properly served or delivered, if delivered by hand to the party to whose attention it is directed, or when sent, three (3) days after deposit in the U.S. mail, postage prepaid, by registered or certified mail, return receipt requested, or if sent by facsimile to the party to whose attention it is directed, addressed as follows:

If to City: The City of Eagle
 Attn: Mayor
 City Hall
 310 E. State Street
 Eagle, ID 83616
 (208) 939-6813
 (208) 939-6827(facsimile)

If to UWID: United Water Idaho Inc.
 Attn: President
 8248 W. Victory Road
 Boise, Idaho 83707
 (208) 362-1704
 (208) 362-3858 (facsimile)

or at such other address or to such other party which any party entitled to receive notice hereunder designates to the other in writing as provided above.

b. Upon reasonable request by City, UWID shall send a representative to any particular meeting of City's Council and shall provide City with quarterly reports of activities in connection with conveying water to and through the System.

c. The failure on the part of either party to enforce its rights as to any provision of the Agreement shall not be construed as a waiver of its rights to enforce such provision in the future.

d. If any party shall fail to perform such party's obligation(s) contemplated herein for any reason, one or more of the other parties may pursue any and all remedies at law or equity; provided, however, all parties affected by any default agree to attempt to mediate a settlement in good faith prior to initiating litigation. In the event litigation is filed, the prevailing party or parties shall be entitled to an award of reasonable costs and attorneys' fees.

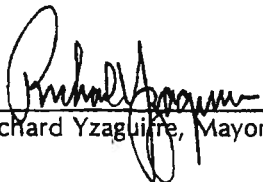
e. If any section, subsection, sentence, clause, phrase or portion of the Agreement is for any reason held invalid, preempted or unconstitutional by any Federal or State court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision of the Agreement, and such holding shall not affect the validity of the remaining portions hereof.

f. The Agreement is subject to all applicable laws of the State of Idaho and ordinances of City.

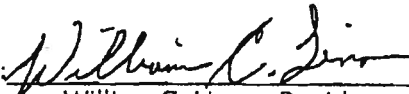
g. The terms, representations, provisions, covenants, agreements and indemnities shall remain binding upon and for the parties hereto until fully observed, kept or performed.

IN WITNESS WHEREOF, the undersigned have duly executed this Agreement as of the date first above written.

CITY OF EAGLE, an Idaho municipal corporation

By: 
Richard Yzaguirre, Mayor

UNITED WATER IDAHO INC., an Idaho corporation

By: 
William C. Linam, President

ATTEST:

By: 
City Clerk



RECEIVED & FILED
CITY OF EAGLE

JUL 14 1997

AGREEMENT TO PROVIDE SUPPLEMENTAL WATER FOR FIRE FLOWS

This Agreement to Provide Supplemental Water for Fire Flows (this "Agreement"), is effective this first day of August, 1997 by and between THE CITY OF EAGLE CITY, a municipal corporation ("Eagle") whose address is 310 East State Street, Eagle, Idaho 83616, and UNITED WATER IDAHO INC., an Idaho corporation ("United Water"), whose address is P.O. Box 7488, Boise, Idaho 83709. m/c

RECITALS:

A. United Water provides domestic, commercial, and fire flow water in the Eagle, Idaho area and is a public utility within the meaning of the Idaho Public Utility law.

B. Eagle desires to obtain an additional source of water, including for fire protection purposes, to serve Eagle.

C. United Water is willing and able to make quantities available to Eagle during each month of the year for the term hereof, as provided further herein.

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained, to be kept and performed by the parties, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, it is mutually agreed as follows to wit:

1. Provision of Water. United Water agrees to provide to City additional water and supplemental fire flow as hereinafter set forth. Said flow shall be provided on August 1, 1997 or within a reasonable time after approval by the Idaho Public Utilities Commission ("IPUC") of such provision by United Water. Water for fire flow shall not be less than One Thousand Five Hundred (1,500) gallons per minute measured at the hydrant nearest to the point of diversion of such water flow from United Water to City. United Water shall provide such flow by tying to City's water system at United Water's Floating Feather Well.

2. Payment: City will pay, as billed monthly, for actual flow through the meter, at the metered tariff rates then allowed to United Water by the IPUC for such provision.

3. Assistance by City. City agrees to use its best efforts to aid and assist United Water in obtaining IPUC approval, as required or as helpful for such approval or to speed such approval. The parties acknowledge that City cannot force said entities to provide such consents, and the only requirement hereof is that City reasonably use its best efforts to such end.

4. Term. The term of this Agreement shall be for one year from and after the date above written, during which term this Agreement may not be terminated by either party. Thereafter, the Agreement shall be deemed automatically extended for successive one-year periods unless terminated as herein provided. Eagle may terminate this Agreement by providing written notice of intention to so terminate at least twelve months prior to the proposed termination. United Water may terminate this Agreement by providing written notice of intention to so terminate at least twelve months prior to the proposed termination.

5. Interruptions: United Water shall use reasonable care and diligence to prevent interruptions and fluctuations in delivering the water provided for in this Agreement. Both parties agree that they will make no claim against each other for damages in the event United Water is unable to deliver water because of the need to make repairs for breaks or leaks or other repairs to its facilities, or because of other causes beyond its control. United Water agrees that any necessary repairs or maintenance shall be scheduled so as to minimize disruption to Eagle. Further, if repairs or maintenance are necessary, United Water will provide to Eagle reasonable advance notice of the need to make repairs and shall complete said repairs or maintenance in a timely and workmanlike manner.

6. Indemnity. Each of the parties hereto agrees to indemnify and hold harmless the other party from and against all actions, suits, proceedings, judgments, costs and expenses relating to any claims arising in connection with the subject matter hereof prior to the execution of this Agreement.

7. Notices: All notices required or desired to be given under this Agreement shall be in writing and delivered personally or sent by facsimile or by first class United States mail, postage prepaid addressed as follows:

If to Eagle:

310 East State Street
Eagle, Idaho 83616
208/939-8813
208/939-8827 (facsimile)
Attn: City Clerk

If to United Water:

United Water Idaho Inc.
P.O. Box 7488
Boise, Idaho 83709
208/362-1704
208/362-3858 (facsimile)

8. Miscellaneous:

- a. Enforcement. The failure on the part of any party to enforce its rights as to any provision of the Agreement shall not be construed as a waiver of such party or parties rights to enforce such provision in the future.
- b. Assignment. This Agreement, and the terms hereof, are binding on the parties named herein, their heirs, successors, and assigns. This Agreement shall not be assigned without the written consent of the other parties hereto not to be unreasonably withheld; provided however, that if the business of United Water is taken over by or transferred to a successor company, such shall not be deemed an assignment hereunder. United Water agrees to give Eagle prompt written notice of any such change in ownership.
- c. Entire Agreement. This Agreement contains the entire agreement between the parties hereto in connection with the transactions contemplated herein and supersedes all previous or contemporaneous communications, representations or agreements. This Agreement may be modified only by written amendment signed by all parties.
- d. Severability. If any section, subsection, sentence, clause, phrase or portion of this Agreement is for any reason held invalid, preempted or unconstitutional by any court or by any Federal or State agency of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision of this Agreement, and such holding shall not affect the validity of the remaining portions hereof.
- e. Application of Law. This Agreement is subject to all applicable laws of the State of Idaho.
- f. Survival. The terms, representations, provisions, covenants, agreements and indemnities shall remain binding upon and for the parties hereto until fully observed, kept or performed.

- g. Authority. The parties hereto represent and confirm that they have the authority to execute this Agreement on their behalf and on behalf of the other persons named herein, although those persons may not have executed this Agreement.
- i. Counterparts. This Agreement may be executed in counterparts, each of which shall constitute an original, but all together shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

CITY OF EAGLE CITY

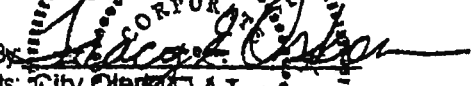
By:
Its:


Mayor

ATTEST:

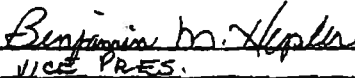


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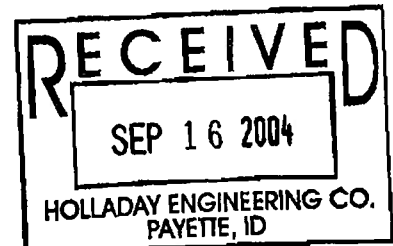
By: 
Its: City Clerk

UNITED WATER IDAHO INC.

By:
Its:


VICE PRES.

EG 091400



WATER SERVICE CONTRACT – 2004

This Water Service Contract – 2004 (this "Contract") is made effective September 15, 2004, as provided by that certain resolution of the City of Eagle City authorizing the execution of this Contract, which resolution is substantially similar to the resolution attached hereto as **Exhibit A** (the "**Commencement Date**"), by and between The City of Eagle ("City"), an Idaho municipal corporation, and United Water Operations Idaho Inc. ("Contractor"), an Idaho corporation, successor in interest to Engineering, Management and Maintenance, Inc. ("EM²"), in order to provide operations, maintenance, and management services for the municipal water system currently owned by City.

RECITALS

A. City, as authorized by Idaho Code, Section 50-323, is the owner of a municipal, domestic water production, transmission and distribution system in the City of Eagle (hereinafter called the "**Water System**"). The geographical boundaries of the Water System are shown on **Exhibit B** attached hereto and made a part hereof, which geographical boundaries of the Water System may be amended at City's sole direction from time to time.

B. City has adopted those certain "Rates, Rules and Regulations for the operation of the Water System of the City of Eagle, Ada County, Idaho", which are codified in Title 6, Chapter 5 of City's Code, attached hereto as **Exhibit C** (the "**Regulations**"). The Regulations, pursuant to Idaho Code, Section 50-301, et seq., may be amended from time to time at the sole discretion of the Eagle City Council. The Regulations, and Idaho Code, Sections 50-301 and 50-323, provide that City may contract for the operation and maintenance of the Water System.

C. City first contracted for the operation and maintenance of the Water System with that certain Water Service Contract by and between City and EM², dated May 26, 1992, as amended by the First Amendment to Water Service Contract, dated December 2, 1997 (collectively, the "**EM² Contract**").

D. Contractor, which is engaged in the business of operating and managing domestic water systems such as the Water System, has succeeded to the interests of EM², including the interests of EM² contained in the EM² Contract.

E. To more specifically define the duties and obligations of City and Contractor in connection with the Water System, the parties hereto desire to amend and restate the EM² Contract by entering into this Contract which terminates and replaces the previously referenced EM² Contract.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and agreed, the recitals above which are incorporated below, and the mutual terms, conditions, covenants and agreements contained herein, the parties hereto agree as follows:

1. TERM OF CONTRACT.

The term of the Contract shall commence on the Commencement Date, and shall expire one (1) year following the Commencement Date (the "**Term**"); provided, however, this Contract shall be renewed automatically, on the same terms as contained herein, in one (1) year increments through September 30, 2012, except as provided in ¶ 9.c. herein.

2. OBLIGATIONS OF CONTRACTOR.

Contractor shall undertake and perform all services and pay all usual and customary expenses required in connection with the normal operation and maintenance of the Water System, including periodic inspections and preventive maintenance, meter reading, billing, collections, record keeping, reporting and compliance with applicable federal, state or local government requirements in connection with the operation and maintenance of the Water System including the following:

A. Staffing. Contractor shall provide a professional staff of qualified employees for operations, maintenance and management procedures in connection with the Water System, and shall

provide additional third-party support as needed to perform the scope of services described herein. The operations staff of Contractor shall be required to possess all required state, federal and local licenses and certifications.

B. Billing; Collection. Contractor shall bill monthly City's existing water customers and other customers as may be added from time to time by City (individually, the "Customer"; collectively, the "Customers") as soon as reasonably practicable, at approximately the same time each month, for such Customers' water service charges in connection with the Water System for the preceding month. All such water service charges collected by Contractor shall be deposited or transferred by Contractor into a designated City account by the fifth (5th) working day of the month for all payments received during the preceding month. Contractor shall collect delinquent accounts according to the terms and conditions of City's ordinances, rules and regulations pertaining to the Water System. Contractor shall provide to City a monthly reporting of billings and collections, the content and format of which to be agreed to by the parties.

C. Compliance with Laws and Regulations. Contractor shall maintain existing regulatory licenses and/or permits that are currently held by City and/or Contractor, and that are necessary for the operation and maintenance of the Water System. Contractor shall comply with all applicable federal, state, and/or local laws, regulations, and ordinances including, without limitation, the Regulations, as such apply to the Water System. This provision shall not be construed to require Contractor to make improvements or repairs in connection with the Water System beyond those required by ordinary and necessary operation and maintenance or as otherwise provided in the Contract.

To the extent that such applicable federal, state, and/or local laws, regulations, and ordinances including, without limitation, the Regulations, are changed so as to require additional Capital Improvements, defined below, and/or Capital Expenditures, defined below, in connection with the Water System in order to effectuate compliance herewith, City shall make, or cause to be made, such Capital Improvements and/or Capital Expenditures at its own expense as soon as practicable, but in no event later than as required by such applicable federal, state, and/or local laws, regulations, orders and ordinances.

D. Water System Repairs. Repairs shall be made in accordance with existing federal, state, and/or local laws, regulations, orders and ordinances including, without limitation, the Regulations; provided, however, Contractor shall not incur "Extraordinary Expenses." By way of example, and not limitation, the payment of a street opening permit to City to effectuate repairs or full-lane road resurfacing beyond standard trench or spot hole repair required by the Ada County Highway District shall be considered an Extraordinary Expense. If, during the course of Contractor's work necessary to make improvements or repairs, hazardous waste and/or materials are discovered, Contractor shall immediately inform City of the discovery both orally and in writing. It shall not be the obligation of Contractor to remove and/or dispose of such hazardous waste or materials. Contractor shall cooperate with City regarding the removal and disposal of soil, hazardous waste and/or materials.

In the event any well or any source of supply within the Water System becomes, or is alleged to have become, contaminated, or in the event of any other circumstance(s) that causes, or is alleged to have caused, non-compliance of the Water System in connection with the standards established by the appropriate applicable state, federal, or local regulatory agencies, which are beyond the reasonable control of Contractor, any and all costs and expenses to attain compliance, and/or to assert compliance, shall be the responsibility of City.

Unforeseen costs associated with Acts of God, changes in laws or regulations and regulatory compliance, or wrongful, willful or negligent acts or omissions of City or third parties which increase operation and maintenance expense, repair costs or other expenses, and which are beyond the reasonable control of Contractor, are the responsibility of City. Conversely, any wrongful, willful or negligent acts or omissions of Contractor, its employees, agents, assigns, subcontractors or others affiliated with Contractor, are the responsibility of Contractor.

(i) Regular and ordinary repairs shall be performed or paid for by Contractor as a normal aspect of Water System operations and maintenance. Regular and ordinary repair of the

Water System shall include all repairs and replacement parts required due to normal wear and tear, including, but not limited to, main, service, and hydrant repair, routine pump, motor, and electrical repairs and maintenance, building and facility repair, maintenance and repainting associated with normal anticipated wear of the physical facilities, and normal periodic maintenance inspections of facilities. Any individual regular and ordinary repair of the Water System in excess of Two Thousand Five Hundred and no/100 Dollars (\$2,500.00) shall be considered an Extraordinary Repair. In such cases of Extraordinary Repair Contractor shall be responsible for the first Two Thousand Five Hundred and no/100 Dollars (\$2,500.00) of cost.

(ii) "Extraordinary Repair" means maintenance activities that correct a default or problem, such as the repair or replacement of equipment with like kind equipment due to the failure of that equipment within the useful life of such equipment, or activities resulting from preventive maintenance surveys taken to avert the failure of such equipment or an integral part thereof during the normal useful life of such equipment. Failures or potential failures of equipment are typically caused by excessive or unusual wear or abnormal deterioration. "Extraordinary Repair" shall also include any repair or replacement in excess of Two Thousand Five Hundred and no/100 Dollars (\$2,500.00) not a result of normal wear and tear or necessitated by untimely equipment or material failure or by damage from vehicle impact, lightening strike, Act of God, or any other unforeseen event. Extraordinary Repair costs shall be the responsibility of City. At the request of City, such Extraordinary Repair may be administered by Contractor and performed as soon as possible, in consideration of the Water System's public duty to provide service on demand. The responsibility of City to pay Extraordinary Repair costs is limited to the direct actual cost of labor, overhead, materials, supplies and contractor costs required to effect the repair or replacement. However, City shall also pay Contractor a fifteen percent (15%) overhead calculated on the total Extraordinary Repair cost as compensation for administering the resolution for such Extraordinary Repair. Billings by Contractor to City for such Extraordinary Repair will be made as soon as possible after the such Extraordinary Repair is completed and will be due thirty (30) days from the invoice date. In the event that City does not request Contractor to effectuate the Extraordinary Repair, then City agrees to hold Contractor harmless from any and all liability resulting from the incident to the extent that Contractor has not been negligent. In the event of an emergency, Contractor with City approval, may undertake steps necessary to protect the health, safety and welfare of the Water System, its patrons, affected property and persons.

(iii) Contractor shall supply such information as is available to assist City in recovering the costs of such Extraordinary Repairs from suppliers' warranties and from parties responsible for accidental damage. Suppliers' warranties shall be made in the name of the City of Eagle. Contractor shall notify City immediately of any accidental or intentional damages to the Water System in order for City to provide notice to its insurance carrier.

(iv) Replacement parts shall be duplicates of original when readily available. If duplicates of original are not readily available, functional generic equivalents may be substituted as long as they comply with American Water Works Association and/or National Sanitation Foundation standards for water system materials.

(v) Routine or emergency well or source of supply rehabilitation and maintenance costs shall be considered the total responsibility of City. Well or source of supply rehabilitation and maintenance costs shall include, without limitation, costs for pulling and setting pumps, motors, piping and associated well equipment, well cleaning and redevelopment, and any associated down-hole video taping. Well or source of supply rehabilitation and maintenance costs also shall include any pump, motor, piping, electrical and associated equipment repair or replacement costs.

E. Reports. Contractor shall comply with all necessary reporting in connection with the operation and maintenance of the Water System as mandated by federal, state and/or local laws, regulations and ordinances, and this Contract. Contractor shall provide City with monthly, quarterly and annual reports of activities in connection with the Water System in a form agreeable to both parties. The form of which shall be substantially similar to the form attached hereto as **Exhibit D**, or as otherwise agreed to by the parties hereto. If a complete report is not received by City within fifteen (15) days from

the date due, Contractor shall pay City a penalty of One Hundred and no/100 Dollars (\$100.00). Contractor shall pay to City a penalty of One Hundred and no/100 Dollars (\$100.00) for every subsequent fifteen (15) days the report is not received by City.

F. Records. Contractor shall act as custodian of those records, files, invoices and statements that Contractor prepares or obtains in connection with this Contract (collectively, the "Records"), which Records shall belong to and are the sole property of City pursuant to Idaho Code Title 50, Chapter 9. Following delivery of notice to Contractor three (3) business days in advance, Contractor shall make available at the offices of Contractor the Records for inspection during regular business hours. Upon the termination or expiration of this Contract, Contractor shall provide City with copies of the Records within thirty (30) days of the date of termination unless, otherwise required by Idaho Code Title 50, Chapter 9, or as agreed to by City and Contractor.

G. Insurance. Contractor shall maintain the following insurance:

(i) Commercial General Liability Insurance and Property Damage: not less than One Million and no/100 Dollars (\$1,000,000.00) to any one (1) person and One Million and no/100 Dollars (\$1,000,000.00) for any one (1) occurrence for bodily injury, and One Million and no/100 Dollars (\$1,000,000.00) broad form coverage for property damage.

(ii) Comprehensive Automobile Liability Insurance: not less than One Million and no/100 Dollars (\$1,000,000.00) for each accident for property damage.

(iii) Workers' Compensation: In accordance with federal and state statutory requirements and liability insurance of not less than One Hundred Thousand and no/100 Dollars (\$100,000.00).

(iv) Umbrella to be in excess of the General Automobile Liability covering Contractor and City with the minimum limit of Five Million and no/100 Dollars (\$5,000,000.00).

All insurance policies, to the extent permitted by law, shall name City as an additional insured. The minimum coverage requirements may, at either party's request, be subject to renegotiation during the Term. Contractor shall notify City at least thirty (30) days prior to the termination of any insurance policy to which City is entitled to be listed as the additional insured under this Agreement.]

H. Digline. Contractor shall contact Digline and establish Contractor as City's representative to Digline. Contractor shall respond to all calls concerning the location of water lines, and mark the locations of such water lines, in connection with the Water System as required by Digline.

I. New Development. At City's request, Contractor shall provide information to City in reference to the status of the Water System and the availability of water service to proposed new developments within the geographical boundaries of the Water System.

J. City Meetings. Upon reasonable request by City, Contractor shall send a representative to any particular meeting of City's City Council.

K. Water Quality Duty. Contractor shall operate the Water System in compliance with all federal, state and local rules and regulations concerning safe drinking standards, but only to the extent that City's Water System facilities effectuate compliance. Contractor shall not be required to make Water System repairs or improvements, beyond those required for normal operation and maintenance, in order to effectuate such compliance. Contractor agrees to indemnify and hold City harmless from any fines or penalties assessed by the appropriate regulatory agencies or for damages incurred by third parties for any and all violations committed by Contractor.

L. Engineering Services. Contractor shall supply normal engineering review services for additions and extensions to City's Water System. All such engineering reviews, including all design calculations, plans, and specifications shall be subject to review by City at City's request, and if so requested shall be submitted to City's Clerk. City may, at its sole discretion and cost, elect to have any

item or project of such engineering performed by others selected by City, without prejudice to this provision and without any reduction in Contractor's fee.

3. OBLIGATIONS OF CITY.

A. Rates. City, by resolution, shall provide for a schedule of minimum charges for water supply service to customers. Nothing herein shall be construed to restrict City from setting and collecting rates beyond the minimum rates as set forth by City. The existing rates are attached hereto as **Exhibit E**.

B. Licenses. City, except as set forth as part of Contractor's obligations, shall obtain and/or continue to maintain existing and contractually contemplated ownership, easements, licenses, equipment, warranties, franchises, and permits for the mutual benefit of both parties hereunder.

C. City's Insurance. City shall obtain and/or maintain general liability and hazard insurance policies with limits not less than those required by the laws of the State of Idaho.

D. Collections. City shall cooperate in collection matters and use City's statutory powers pertaining to any and all remedies granted to municipalities for purposes of collection.

E. Right of Access. City shall provide Contractor, its employees, agents and subcontractors, with any and all rights of access to the Water System necessary for the operation, repair and maintenance of the Water System.

F. Private Law. City shall advise Contractor of any private (for example, homeowners' association) conditions, covenants, restrictions and/or easements which affect, or which may affect, the Water System and/or the operation and maintenance of the Water System. This only applies to such information readily known by City which does not create a duty for City to inquire of the existence of such private law as referred to in this paragraph.

G. Public Law. City shall advise Contractor of any public law, ordinance, contract, and/or regulation which affects, or which may affect, the Water System, water services, water use, and scheduled rates, charges and fees in connection with the Water System. No change, modification or amendment to the Regulations and/or the geographical boundaries of the Water System shall be made by City without reasonable notice to and advice from Contractor. No change, modification or amendment to the Regulations and/or the geographical boundaries of the Water System shall be made that would increase costs to operate and maintain the Water System unless City adopts, by resolution, an increase in the rates, charges and fees paid to Contractor.

H. Street Openings and Hazardous Materials. Contractor shall not incur expenses for right-of-way opening permits. If, during the course of Contractor's work under this Contract, hazardous waste or materials are discovered, it shall be City's responsibility to remove and/or dispose of such hazardous waste or material.

4. CAPITAL IMPROVEMENTS; PLAN AND BUDGET.

A. Capital Improvement. "Capital Improvement" or "Capital Expenditure" means modifications and alterations of, or additions and improvements to, the Water System that are made to modify or replace existing equipment or facilities, or the construction of new facilities in order to improve the operation and maintenance, aesthetics, long-term capital conditions or other aspects of the Water System not generally associated with the ongoing maintenance of the equipment of the Water System. Capital Improvements are generally anticipated to have a useful life in excess of one (1) year. All Capital Improvements, of any amount, are the responsibility of City; however, minor capital improvement items of less than Seven Hundred Fifty and no/100 Dollars (\$750.00) for materials, equipment and services shall be considered repairs and are the responsibility of Contractor. All new and replacement meters and meter settings, regardless of cost, shall always be considered as Capital Improvements and are the responsibility of City.

B. Capital Improvements Plan. On an annual basis, Contractor and City shall develop, for City's consideration, a capital improvements plan ("Capital Improvements Plan") for the Water System. The Capital Improvements Plan must include conceptual solutions for operational problems and must address issues related to City's population growth and Water System capacity. City will have full and exclusive discretion in and responsibility for decisions related to the implementation of the Capital Improvements Plan. City agrees to compensate Contractor for any increased operating costs resulting from City's decision not to implement a Capital Improvement that was recommended by Contractor to the extent that the increased operating cost would have likely been avoided if the Capital Improvement had been implemented. The Capital Improvements Plan will list all capital expenditures Contractor anticipates will be needed for the coming year, their estimated cost, including engineering costs, their benefit to the Water System, their environmental benefit and/or risk, as appropriate, and their relative importance (rank) as compared to all other potential Capital Improvements. A recommended Capital Improvements Plan from Contractor shall be delivered to City by June 15 of every year before City's annual budget cycle begins. Contractor shall bear no liability for the accuracy of the cost estimates. The Capital Improvements Plan will be prepared every year and include Capital Improvements Contractor anticipates will be needed.

C. Emergencies or Improvements Required by Law. In the event that a Capital Improvement is required (a) in order to continue to provide service to the users, (b) to be made to the Water System in order to comply with applicable federal, state or local law, or (c) if the failure to make a Capital Improvement will jeopardize the health and safety of the residents of City or the public welfare, City shall be obligated to implement such Capital Improvement or City may direct Contractor to implement the Capital Improvement, as soon as practicable under the circumstances. In the event that Contractor expends any of its own monies for the implementation of any Capital Improvement, Contractor shall be promptly reimbursed by City.

5. COMPENSATION AND FINANCIAL TERMS.

A. Service Fee Generally. From and after the Commencement Date of this Contract, City shall pay the Annual Service Fee, defined below, to Contractor as compensation for Contractor's services under this Contract. The Annual Service Fee shall be calculated according to this Section 5.

B. Annual Service Fee. The Annual Service Fee shall be comprised of the Base Operating Charge, the Adjustment Factor, the New Accounts Adjustment Factor, the Variable Costs Factor, all as defined below, and shall be paid to Contractor in monthly installments.

C. Base Operating Charge. The Base Operating Charge is the base fee paid to Contractor for performing the services contemplated in the Contract. Any adjustment to the Base Operating Charge shall become the new Base Operating Charge for use in making future adjustments thereto. The initial Base Operating Charge shall first be defined as set forth in Exhibit F attached to this Agreement. By way of example, and not limitation:

- Base Operating Charge at the Commencement Date = A
- New Accounts Factor in a given month six of the Contract = B
- New Base Operating Charge in the following month of the Contract = A + B = C
- Annual Adjustment Factor calculated on the first anniversary of the Contract = D
- New Base Operating Charge beginning on the first anniversary of the Contract = C + (C x D)

D. Adjustment Factor. The Adjustment Factor shall be added to the current annual Base Operating Charge and shall be an amount equal to the greater of either: (1) two percent (2%) of the current annual Base Operating Charge; or (2) the product of the current annual Base Operating Charge multiplied by the percentage change in the CPI published for the month of the then existing CPI Adjustment Date as compared with the CPI for the month of the last previous CPI Adjustment Date. "CPI" shall mean the Consumer Price Index for all urban consumers (CPI-U) Combined West Region Urban Area – size B/C, as per the Bureau of Labor Statistics. "CPI Adjustment Date" shall mean the

Commencement Date and each annual anniversary thereafter during the term of this Contract. The annual increase in the CPI shall be expressed as a percentage. If the CPI is discontinued or is unavailable, City and Contractor shall mutually select a comparable index reflecting changes in the cost of living or purchasing power of the consumer dollar published by any other governmental agency, or nationally recognized financial institution, or any other nationally recognized authority.

The following formula would be used to calculate the product of the Base Operating Charge and the CPI:

$$AF = \frac{CPI_m}{CPI_{m-1}}$$

(AF is the Adjustment Factor, CPI_m is the current year's CPI, and CPI_{m-1} is the previous year's CPI)

In the event the Adjustment Factor cannot be determined on a CPI Adjustment Date due to the unavailability of the applicable CPI, then City shall continue to pay to Contractor the Annual Service Fee then in effect until City receives the calculations of the Adjustment Factor and the Annual Service Fee based on the applicable CPI. City shall also pay to Contractor, the differential in the monthly installments of the Annual Service Fee based upon the adjustment to the CPI, calculated from the applicable CPI Adjustment Date to the date City commenced paying monthly installments of Annual Service Fee to Contractor based upon such applicable adjustment.

E. New Accounts Adjustment Factor. The Base Operating Charge shall also be adjusted in accordance with changes in the number of Equivalent Residential Customers ("ERCs") connected to and served by the Water System. The basis for determining the number of ERCs shall be the following:

Meter Size (in.)	5/8	=	1	ERC
	5/8x3/4	=	1	ERC
	3/4	=	1	ERC
	1	=	1.67	ERCs
	1-1/2	=	3.33	ERCs
	2	=	5.33	ERCs
	3	=	10	ERCs

(Source: AWWA Volume 3 Introduction to Water Distribution, Principles and Practices of Water Supply Operations)

The New Accounts Adjustment Factor is an amount equal to the most current Base Operating Charge divided by the most current number of ERCs multiplied by the number of new ERCs for the preceding month. The New Accounts Adjustment Factor shall be determined monthly and the Base Operating Charge shall be adjusted monthly by adding the New Accounts Adjustment Factor to the previous month's Base Operating Charge.

F. Variable Cost Factor. The Variable Costs Factor adjusts the Base Operating Charge in accordance with changes in the costs of power purchased in connection with the Water System from Idaho Power Company, or another applicable power provider, which costs include base rate and power cost adjustment changes, as approved by the Idaho Public Utilities Commission. The Base Operating Charge shall be adjusted, up or down, immediately upon any and all changes in the costs of such power purchased in connection with the Water System. Any newly approved power rate shall be applied to the most recent twelve (12) months billings of power purchased in connection with the Water System. The resulting new annual power cost shall be compared to the most recent twelve (12) months power cost and the difference between the two shall be divided by twelve and applied to the monthly Base Operating Charge for all ensuing months Service Fee payments.

G. Extraordinary Items Charge. The Extraordinary Items Charge represents any and all cost incurred by Contractor that is or will become the obligation of City. Examples of Extraordinary Items Charges include costs incurred by Contractor for Extraordinary Repair and/or Capital Improvement performed at the direction of City that is City's responsibility. Extraordinary Items Charges would be itemized and presented to City for payment with the next month's Service Fee payment to Contractor.

H. Changes in Scope of Work. In the event that changes in the scope of work occur due to, but not limited to, changes in law, governmental regulations, monitoring requirements, water quality standards, addition of new facilities, force majeure events, or other events that increase the cost of operating the Water System by over two percent (2%) of the Base Operating Charge, the parties shall negotiate an appropriate adjustment to the Annual Service Fee to accommodate the change in scope of work.

I. Additional Services. In addition to the Annual Service Fee payments referred to above, City shall also pay for any additional services added to the scope of work or services as described in Section 2, Obligations of Contractor, of this Contract. Prior to commencement of a change in the scope of service or type of service to be provided by Contractor that involves increased costs, Contractor and City shall mutually agree in writing upon the nature of the change in scope of service and/or type of service and the appropriate compensation for such change of work. Such written agreement shall be known as an "Additional Service Agreement." Each Additional Service Agreement shall identify the scope of the additional work, the estimated cost, the timing for the work or service and other pertinent items as agreed to by the parties. Extraordinary Repairs may be, but are not required to be, considered under Additional Service Agreements.

J. Billings and Payments. Contractor shall bill and City shall pay Contractor for all work and services performed under this Contract in monthly installments in an amount equal to the sum of (1) one-twelfth of the Annual Service Fee; (2) any Extraordinary Repairs performed by Contractor; and (3) any amounts due for work performed under Additional Service Agreements. The monthly billing from Contractor shall be submitted monthly and the payment shall be due within thirty (30) days of receipt of the billing. The monthly bill shall include the ensuing month's portion of the Annual Service Fee plus any amounts due from the current month related to all Extraordinary Repairs and/or Additional Service Agreements, or other amounts owed. Any discrepancy between the amount paid by City and the amount earned by Contractor for any month shall be reconciled in the next month's payment. Monthly payments may be made via electronic transfer of funds. Any and all amounts past due more than thirty (30) days shall be liable for interest calculated at the rate of eighteen percent (18%) per annum.

6. INDEPENDENT CONTRACTOR; INDEMNITY.

Contractor is an independent contractor, City is the principal, and nothing herein shall be construed to create a joint venture, partnership or other similar relationship that might subject either party to liability for the debts or obligations of the other party. Each party shall indemnify and hold harmless the other party against any and all liabilities, losses, damages, costs or expenses, including reasonable attorneys' fees as a result of any claims, causes of actions, judgments and damages of any kind arising out of work performed under this Contract that such party sustains, caused in whole or part by any negligent or wrongful acts or omissions on the part of the indemnifying party or any employee or agent of such party.

City shall hold harmless and indemnify Contractor for any loss, damage or claim resulting from defects in those parts of the Water System constructed prior to the First Amendment to Water Service Contract, dated December 2, 1997, to the extent that such defects have not been discovered at the time of this Contract.

In the event Contractor, together with City, are negligent, and the negligence of each is the proximate cause of damage(s), then each party shall be responsible for the portion of the liability or damages equal to that party's comparative share of the total negligence. Contractor reserves the right to conduct Contractor's own defense and settle any claims made against Contractor or for which Contractor shall be responsible.

7. REPRESENTATIONS AND WARRANTIES.

A. Authority. City is a municipal corporation established under the laws of the State of Idaho and has the requisite power and authority to enter into this Contract. Contractor is a corporation established under the laws of the State of Idaho and has the requisite power and authority to enter into this Contract.

B. Legal Capacity. City has the exclusive legal capacity and authority to establish the water service rates, charges and fees pursuant hereto, and warrants and represents that no prior liens, notes, bonds, mortgages, encumbrances or other entitlements have been imposed on the Water System, or will be imposed on the Water System, that have or may have priority over the entitlements of Contractor pursuant to this Contract.

C. Claims. City has no knowledge of any current, pending or threatened claims, suits, actions or judgments which, if successful, would create an encumbrance upon the entitlements of Contractor pursuant to this Contract or would otherwise have a materially adverse effect on the Contract and/or the Water System.

D. Disclosures. City has disclosed, and shall continue to disclose, to Contractor, and Contractor has disclosed, and shall continue to disclose, to City, any and all circumstances discovered indicating possible non-compliance of the Water System in connection with any and/or all applicable federal, state, and/or local laws, regulations, and ordinances including, without limitation, the Regulations, as such apply to the Water System and/or safe drinking water standards.

E. Compliance. City is in compliance with, shall remain in compliance with and shall ensure the compliance of any and all separate and existing contracts and/or agreements in connection with the Water System including, without limitation, that certain Agreement for Transfer and Operation of Domestic Water, dated May 20, 1992, as may be amended from time to time.

8. NOTICES.

All notices, demands, requests, and other communications under this Contract shall be in writing and shall be deemed properly served or delivered, if delivered by hand to the party to whose attention it is directed, or when sent, three (3) days after deposit in the U.S. mail, postage prepaid, by registered or certified mail, return receipt requested, or if sent by facsimile to the party to whose attention it is directed, addressed as follows:

If to City: The City of Eagle
Attn: City Clerk
City Hall
310 E. State Street
Eagle, Idaho 83616
(208) 939-6813 (phone)
(208) 939-6827 (facsimile)

If to Contractor: United Water Operations Idaho Inc.
Attn: General Manager
P.O. Box 190420
8248 W. Victory Road
Boise, Idaho 83719-0420
(208) 362-7327 (phone)
(208) 362-7069 (facsimile)

or at such other address or to such other party which any party entitled to receive notice hereunder designates to the other in writing as provided above.

9. FORCE MAJEURE; TERMINATION.

A. Force Majeure. The parties shall be excused from performance of this Contract and shall not be liable for loss or damage where the loss or damage is caused by events that are outside the reasonable control of the party relying thereon for justification for not performing, or delay or failure to perform, due to, but not limited to, fire, riot, strikes, labor disputes, acts of God, acts of terrorism, insurrections, explosions, civil disturbances, discharges into the Water System, governmental acts or

regulations, or other matters, where all the foregoing is beyond the control of the parties to this Contract, agents or representatives.

B. Labor Stoppage. In the event a labor action, stoppage or dispute which disrupts or prevents Contractor, its employees, agents or subcontractors from entering upon and performing work on the Water System, City, with Contractor's assistance, or Contractor at its own option, shall seek appropriate legal injunctions, remedies or court orders. During such a designated period, Contractor shall operate the Water System on a best effort basis until labor relations are normalized and shall not be liable for any fines or penalties.

C. Termination. If either party shall be in material default hereunder, then at the non-defaulting party's option, after ninety (90) days written notice to the defaulting party, the non-defaulting party may terminate this Contract without waiving any other lawful right or remedy of the non-defaulting party. However, prior to termination, all parties affected by any default shall be required to attempt mediation and settlement in good faith prior to initiating litigation, and the defaulting party shall have been given a period of thirty (30) days after receipt of such written default notice from the non-defaulting party, or such longer period of time as is reasonably required under the circumstances, to cure and/or correct such default. In the event litigation is filed, the prevailing party shall be entitled to an award of reasonable costs and attorneys' fees. No right or remedy is intended to be exclusive of any other right or remedy, and each and every right and remedy shall be cumulative and in addition to any other right and remedy given hereunder or now or hereafter existing at law or in equity. The failure of a party to insist at any time upon the strict performance of any covenant or agreement hereunder, or to exercise any option, right, power or remedy contained in this Contract shall not be construed as a waiver or relinquishment thereof for the future unless expressed in writing and signed by the party against whom the enforcement of such waiver is sought.

Notwithstanding anything to the contrary herein, if Contractor, in its reasonable discretion, determines that the rates, charges and/or fees established by City will not enable Contractor to carry out Contractor's obligations, or for any other reason, Contractor may deliver to City notice of the termination of this Contract, whereupon one hundred twenty (120) days after such notice this Contract shall terminate and Contractor shall deliver to City the Records. Within one hundred twenty (120) days after the delivery of such notice, Contractor shall pay to City, and City shall pay to Contractor, any and all amounts owed hereunder as of the date of termination.

Notwithstanding anything to the contrary herein, if City, in its reasonable discretion, determines that the rates, charges and/or fees established by Contractor will not enable City to carry out City's obligations, or for any other reason, City may deliver to Contractor notice of the termination of this Contract, whereupon one hundred twenty (120) days after such notice this Contract shall terminate. Within one hundred twenty (120) days after the delivery of such notice, City shall pay to Contractor, and Contractor shall pay to City, any and all amounts owed hereunder as of the date of termination.

10. GENERAL PROVISIONS.

A. New Equipment. Any new equipment installed in connection with the Water System during the Term hereof shall become the property of City. Contractor shall maintain books and records regarding any such new equipment.

B. Assignment. Contractor shall be permitted to make an assignment of this Contract to any company affiliated with Contractor, and Contractor may assign this Contract to any other company with City's written consent, which consent shall not be unreasonably withheld.

C. Equal Opportunity. Contractor is an equal opportunity employer.

D. Public Notices. City shall issue all public notices associated with non-compliance or possible non-compliance with regulatory requirements for drinking water standards, and Contractor shall provide all necessary support that City may reasonably require.

E. Severability. If any section, subsection, sentence, clause, phrase or portion of this Contract is for any reason held invalid, preempted or unconstitutional by any court or by any federal or state agency of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision of the Contract, and such holding shall not affect the validity of the remaining portions hereof.

F. Application of Law. The Contract is subject to all applicable laws of the State of Idaho and ordinances of the municipality of the City of Eagle.

G. Survival. Paragraphs 2(B), 2(D)(iii), 2(E), 2(F), 2(K), 5(J), 6, 8 and 9(C) shall survive the expiration or termination of this Agreement until such enumerated duties are completed by the parties.

H. Captions. The captions at the beginning of the several paragraphs are for convenience in locating the context but are not part of the text.

I. Entire Agreement. This Contract embodies the entire contract between the parties hereto with respect to the subject matter hereof. No extension, change, modification or amendment to or of this Contract of any kind whatsoever shall be made or claimed by City or Contractor shall have any force or effect whatsoever unless the same shall be endorsed in writing and be signed by the party against whom the enforcement of such extension, change, modification or amendment is sought, and then only to the extent set forth in such instrument.

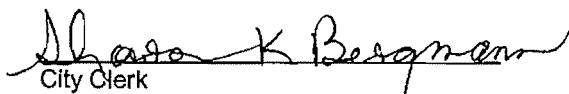
J. Access. City officials and representatives shall have access to the Water System in connection with the Contract during normal business hours and at other times with reasonable notice.

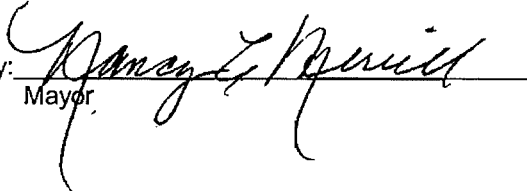
K. Enforcement. The failure on the part of either party to enforce its rights as to any provision of the Contract shall not be construed as a waiver of its rights to enforce such provision in the future.

IN WITNESS WHEREOF, the undersigned have duly executed this Water Service Contract –2004 as of the date first above written.

ATTEST:

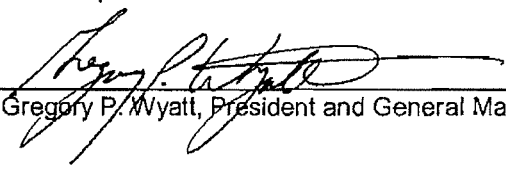
THE CITY OF EAGLE, an Idaho municipal corporation


City Clerk

By: 
Mayor



UNITED WATER OPERATIONS IDAHO INC.,
an Idaho corporation

By: 
Gregory P. Wyatt, President and General Manager

Schedule of Exhibits:

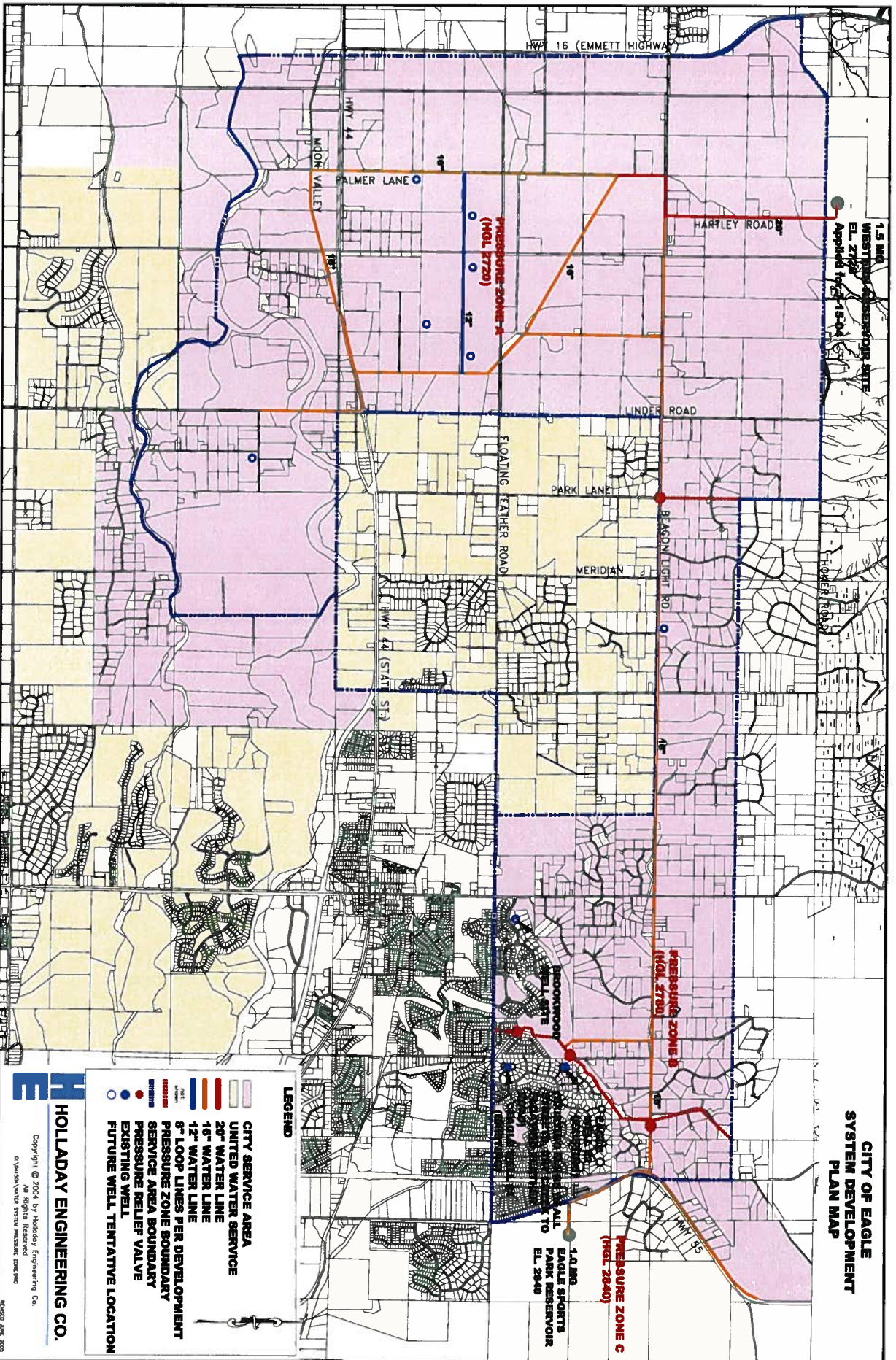
Exhibit A: Resolution of the City of Eagle City
Exhibit B: Geographical Boundaries of the Water System
Exhibit C: Regulations
Exhibit D: Form of Report
Exhibit E: General Metered Service
Exhibit F: Initial Base Operating Charge

APPENDIX C

System Development Plan Map

Development Blocks Plan Map

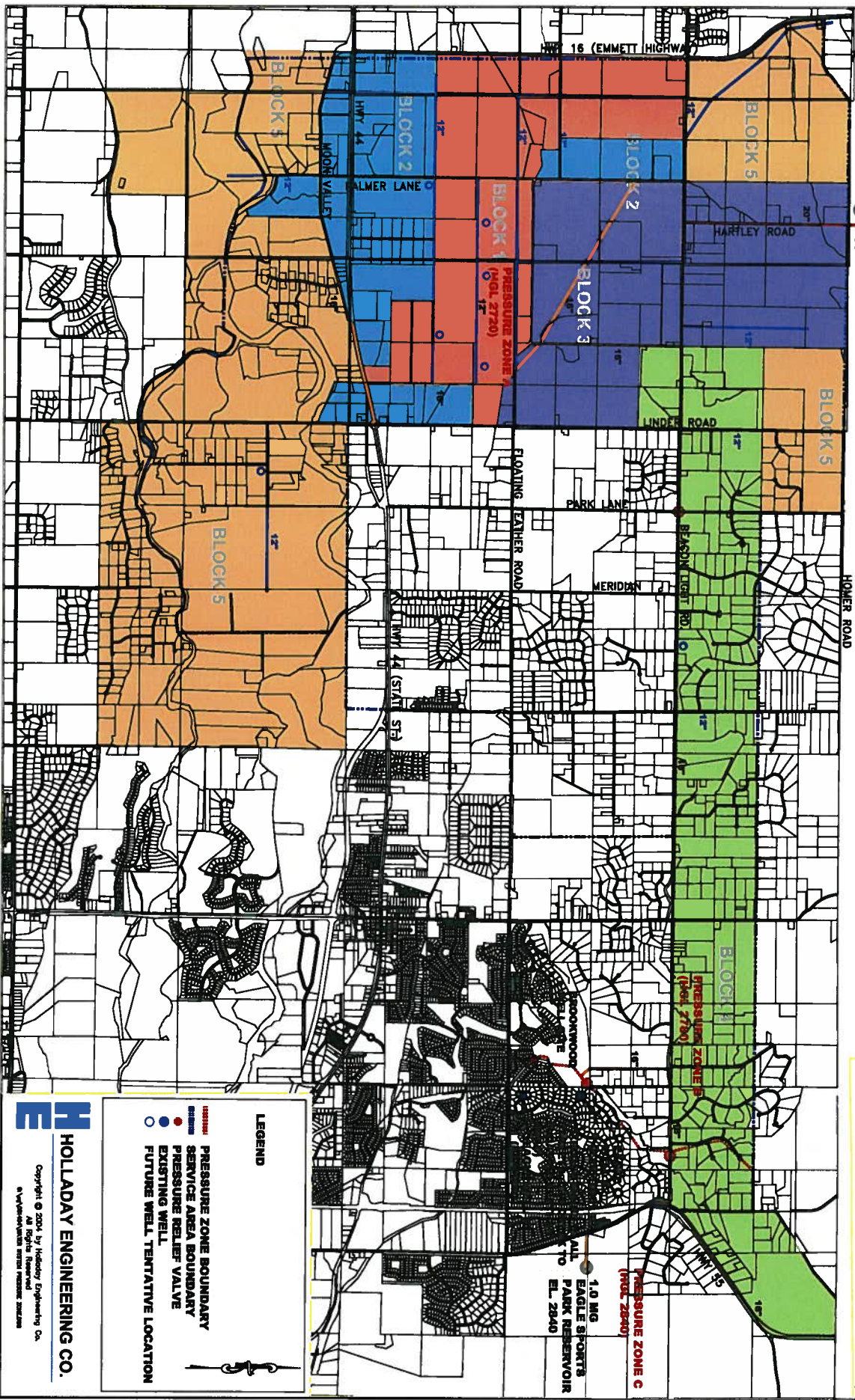
CITY OF EAGLE SYSTEM DEVELOPMENT PLAN MAP



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0. VANDERBILT SYSTEMS INCORPORATED, 2004, PWS
REVISED: JUNE 2005

1.5 MG
WESTERN RESERVOIR SITE
EL. 2720
Applied for 7-15-04

CITY OF EAGLE
DEVELOPMENT BLOCK MAP
FOR WATER SUPPLY AND TRUNK LINES



LEGEND

- PRESSURE ZONE BOUNDARY
- SERVICE AREA BOUNDARY
- PRESSURE RELIEF VALVE
- EXISTING WELL
- FUTURE WELL TENTATIVE LOCATION

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A WASHINGTON STATE LICENSED ENGINEER

APPENDIX D
System Water Usage
Summary From Records
Typical Monthly Reports
(Sep. 2004 & Oct. 2004)

Eagle City Water System Water Usage Jan., 2002 to present

EG051404 KRR 11/26/2004

(Customer count and monthly total usage per UWO reports.
Per-capita usage calculated by HECO)

Year	Month	Users	Total Kgal	Average Gal/mo.	Average GPD
2002	Jan	958	7,600	7933.194	255.9095
	Feb	977	5703	5837.257	208.4735
	Mar	989	5933	5998.989	193.5158
	Apr	1004	7124	7095.618	236.5206
	May	1008	8929	8858.135	285.7463
	Jun	1026	9102	8871.345	295.7115
	Jul	1040	11189	10758.65	347.0533
	Aug	1040	10229	9835.577	317.2767
	Sep	1040	9527	9160.577	305.3526
	Oct	1042	8806	8451.056	272.6147
	Nov	1070	10697	9997.196	333.2399
	Dec	1078	6729	6242.115	201.3585
2003	Jan	1083	7508	6932.595	223.6321
	Feb	1087	5818	5352.346	191.1552
	Mar	1097	6073	5536.007	178.5809
	Apr	1100	7325	6659.091	221.9697
	May	1127	8975	7963.62	256.891
	Jun	1132	10595	9359.541	311.9847
	Jul	1139	10849	9525.022	307.2588
	Aug	1144	11617	10154.72	327.5716
	Sep	1152	9414	8171.875	272.3958
	Oct	1160	8501	7328.448	236.4016
	Nov	1166	11575	9927.101	330.9034
	Dec	1177	8110	6890.399	222.2709
2004	Jan	1182	8890	7521.151	242.6178
	Feb	1196	8330	6964.883	240.1684
	Mar	1197	8958	7483.709	241.41
	Apr	1219	15883	13029.53	434.3177
	May	1222	9643	7891.162	254.5536
	Jun	1230	10025	8150.407	271.6802
	Jul	1238	12739	10289.98	331.935
	Aug	1241	12029	9692.99	312.6771
	Sep	1248	12272	9833.333	327.7778

**Water Information
From United Water Reports**

	Total Customer	Total Consumption x 1,000
Jan-02	958	7,600
Feb-02	977	5,703
Mar-02	989	5,933
Apr-02	1,004	7,124
May-02	1,008	8,929
Jun-02	1,026	9,102
Jul-02	1,040	11,189
Aug-02	1,040	10,229
Sep-02	1,040	9,527
Oct-02	1,042	8,806
Nov-02	1,070	10,697
Dec-02	1,078	6,729
Jan-03	1,083	7,508
Feb-03	1,087	5,818
Mar-03	1,097	6,073
Apr-03	1,100	7,325
May-03	1,127	8,975
Jun-03	1,132	10,595
Jul-03	1,139	10,849
Aug-03	1,144	11,617
Sep-03	1,152	9,414

Oct-03	1,160	8,501
Nov-03	1,166	11,575
Dec-03	1,177	8,110
Jan-04	1,182	8,890
Feb-04	1,196	8,330
Mar-04	1,197	8,958
Apr-04	1,219	15,883
May-04	1,222	9,463
Jun-04	1,230	10,025
Jul-04	1,238	12,739
Aug-04	1,241	12,029
Sep-04	1,248	12,272

EG 05/404

United Water

United Water Operations Idaho Inc.
8248 West Victory Road
PO 190420
Boise, ID 83719-0420
telephone 208-362-1300
facsimile 208-362-7069

October 27, 2004

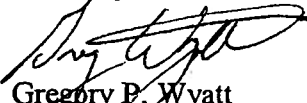
Lynne Sedlacek
Council Member
City of Eagle
310 E. State Street
Eagle, ID 83616

Dear Ms. Sedlacek:

Reports for September 2004 and the Third Quarter 2004 on the contract between United Water Operations and the City of Eagle are enclosed. I have included three copies of the reports, one for you and two for distribution to other council members. A copy also will be forwarded to Vern Brewer, your city engineer.

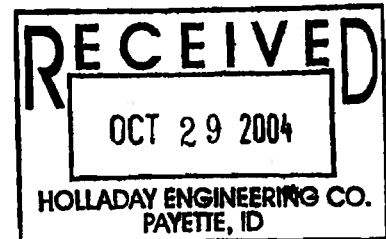
We appreciate the opportunity to provide contract services to the City of Eagle. Please feel free to contact me if you have any questions regarding these reports.

Sincerely,


Gregory P. Wyatt
President

✓ cc: Vern Brewer, Holladay Engineers

Enclosures: September 2004 Report (3 copies)
Third Quarter 2004 Report (3 copies)



United Water
Monthly Report
City of Eagle O&M Contract
Month: September 2004

Financial Data

Monthly Production (1000 gallons)	8,370
Water Imported from UWID (1000 gallons)	<u>2,253</u>
Total	10,623*

*Production figures are from 9/01-9/30 while consumption figures are based on meter reading period of 8/11-9/13.

Monthly Consumption (1000 gallons)	12,272
Monthly Revenue Billed (Total)	\$22,036
Water Sales	\$20,716
Meter Set Fees	\$1,320

Total Customers YTD - Current Month	1,248
Total Customers YTD - Prior Month	1,241
Net Change	7

Field Operations

New Construction Inspection	0
Fire Flows	0
Fire Hydrant Maintenance	0
Valve Box Maintenance	0
Meter Box Maintenance	1
Leak Repair	0
Leak Checks	0
Dig Line Locations	8
Pressure Complaints	0
Service Installations	0

Customer Complaints

Written Complaints	0
Summary of Complaints	
Oral Complaints	0
Summary of Complaints	

Additional Comments: Installed five sample stations.

United Water
Quarterly Report
City of Eagle O&M Contract
Third Quarter - 2004

<u>Financial Data</u>	<u>Qtr</u>	<u>YTD</u>
Quarterly Production (1000 gallons)	29,640	73,778
Water Imported from UWID (1000 gallons)	6,325	30,766
Water Exported to UWID (1000 gallons)	<u>0</u>	<u>0</u>
Total	35,965	104,544

Quarterly Consumption (1000 gallons)	36,444	97,518
--------------------------------------	--------	--------

Quarterly Revenue Billed (Total)	\$61,650	\$162,337
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Aged Accounts Receivable

Write-offs to Expense	213.49	438.49
-----------------------	--------	--------

Current	30 Days	60 Days	90 Days	Total	% of Total (90 Days)
\$19,566.80	\$1,345.90	\$327.17	\$43.47	\$21,283.34	0.2%

Total Customers

Beginning of Qtr	July 2004	August 2004	September 2004
1,230	1,238	1,241	1,248

Bacterial & Chemical Tests (See attached)

Date of Test	Location	Test Result
7/7/2004	Lexington Hills Well #1	Absence
7/19/2004	1930 Stonybrook Ct	Absence
8/2/2004	Fire Hydrant near Well #1	Absence
8/17/2004	Fire Hydrant near Well #1	Absence
9/7/2004	Lexington Hills Well #1 - 4"	Absence
9/22/2004	1930 Stonybrook Ct	Absence
9/21/2004	12 sites in system for Lead and Copper	Results pending at the lab

Power & Chemical Costs**Power****Quarter**
\$2,588.32**YTD**
\$7,274.68

See attached power bills.

Chemicals**Quarter**
\$490.12**YTD**
\$1,470.36**Field Operations****Major Activities with Customer Notification**

None

Fire Suppression

None

Unaccounted-for-Water 12-mo. Rolling Avg. @ September 2004: 2.47%**Capital Program****Capital Expenditures****Quarter** \$ 2,938**YTD** \$15,882**Capital Projects**

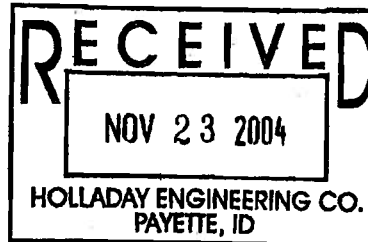
Installed five sample stations.

Additional Comments:

United Water



United Water Operations Idaho Inc.
8248 West Victory Road
PO 190420
Boise, ID 83719-0420
telephone 208-362-1300
facsimile 208-362-7069



November 19, 2004

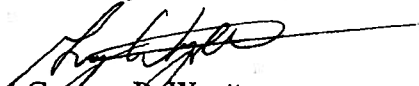
Lynne Sedlacek
Council Member
City of Eagle
310 E. State Street
Eagle, ID 83616

Dear Ms. Sedlacek:

The report for October 2004 on the contract between United Water Operations and the City of Eagle is enclosed. I have included three copies of the report, one for you and two for distribution to other council members. A copy also will be forwarded to Vern Brewer, your city engineer.

We appreciate the opportunity to provide contract services to the City of Eagle. Please feel free to contact me if you have any questions regarding these reports.

Sincerely,



Gregory P. Wyatt
President

cc: Vern Brewer, Holladay Engineers

Enclosures: October 2004 Report (3 copies)

United Water
Monthly Report
City of Eagle O&M Contract
Month: October 2004

Financial Data

Monthly Production (1000 gallons)	7,610
Water Imported from UWID (1000 gallons)	<u>1,676</u>
Total	9,286

Monthly Consumption (1000 gallons)	8,353
Monthly Revenue Billed (Total)	\$33,725
Water Sales	\$33,125
Meter Set Fees	\$ 600

Total Customers YTD - Current Month	1,250
Total Customers YTD - Prior Month	1,248
Net Change	2

Field Operations

New Construction Inspection	0
Fire Flows	0
Fire Hydrant Maintenance	0
Valve Box Maintenance	0
Meter Box Maintenance	0
Leak Repair	0
Leak Checks	0
Dig Line Locations	12
Pressure Complaints	0
Service Installations	0

Customer Complaints

Written Complaints	0
Summary of Complaints	

Oral Complaints	0
Summary of Complaints	

Additional Comments:

United Water



United Water Operations Idaho Inc.
8248 West Victory Road
PO 190420
Boise, ID 83719-0420
telephone 208-362-1300
facsimile 208-362-7069

December 20, 2004

Lynne Sedlacek
Council Member
City of Eagle
310 E. State Street
Eagle, ID 83616

Dear Ms. Sedlacek:

The report for November 2004 on the contract between United Water Operations and the City of Eagle is enclosed. I have included three copies of the report, one for you and two for distribution to other council members. A copy also will be forwarded to Vern Brewer, your city engineer.

We appreciate the opportunity to provide contract services to the City of Eagle. Please feel free to contact me if you have any questions regarding these reports.

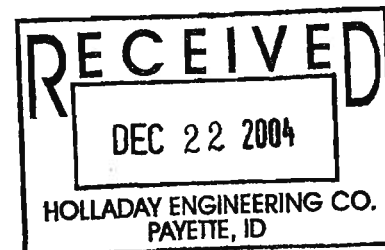
Sincerely,



Gregory P. Wyatt
President

cc: Vern Brewer, Holladay Engineers

Enclosures: November 2004 Report (3 copies)



***United Water
Monthly Report
City of Eagle O&M Contract
Month: November 2004***

Financial Data

Monthly Production (1000 gallons)	8,380
Water Imported from UWID (1000 gallons)	<u>1,787</u>
Total	10,167

Monthly Consumption (1000 gallons)	8,603
Monthly Revenue Billed (Total)	\$24,8846
Water Sales	\$24,846
Meter Set Fees	\$ 1,080

Total Customers YTD - Current Month	1,255
Total Customers YTD - Prior Month	1,250
Net Change	5

Field Operations

New Construction Inspection	0
Fire Flows	2
Fire Hydrant Maintenance	0
Valve Box Maintenance	0
Meter Box Maintenance	6
Leak Repair	0
Leak Checks	0
Dig Line Locations	18
Pressure Complaints	1
Service Installations	0

Customer Complaints

Written Complaints	0
Summary of Complaints	

Oral Complaints	1
Summary of Complaints	

Low pressure at 1790 Estancia – customer problem

Additional Comments:

APPENDIX E

Improvement Design Concepts

EAGLE SPORTS PARK RESERVOIR

Probable cost for Design and Construction

Assumptions:

- Land may be acquired from Ada County for nominal lease, 50 year term.
- Overflow pond will serve dual purpose for Eagle Sports Park irrigation pond.
- Master Plan Report will be used as supporting documentation for need.
- Legal and Administrative cost shall not exceed 5% of construction.
- Buried prestressed concrete tank will be shielded from view by natural terrain.

Probable Costs:

• Buried 1-MG Prestressed Concrete Tank	\$ 600,000
• Site Preparation	\$ 75,000
• 1,200 LF 16 inch trunk line @ \$90/LF	\$ 108,000
• Valves and miscellaneous fittings	\$ 12,000
• Landscaping, irrigation system	\$ 50,000
• Overflow pond and line	\$ 100,000
• Service road, 900 LF @ \$50/LF	\$ 45,000

<u>Subtotal Construction Cost</u>	\$ 990,000
--	-------------------

• Contingency @ 10%	\$ 99,000
• Preliminary planning report	\$ 40,000
• Design & geotech engineering @ 8%	\$ 80,000
• Construction period engineering @ 7%	\$ 70,000
• Legal, administration, bond cost @ 5%	\$ 50,000
• Total Cost	\$1,320,000

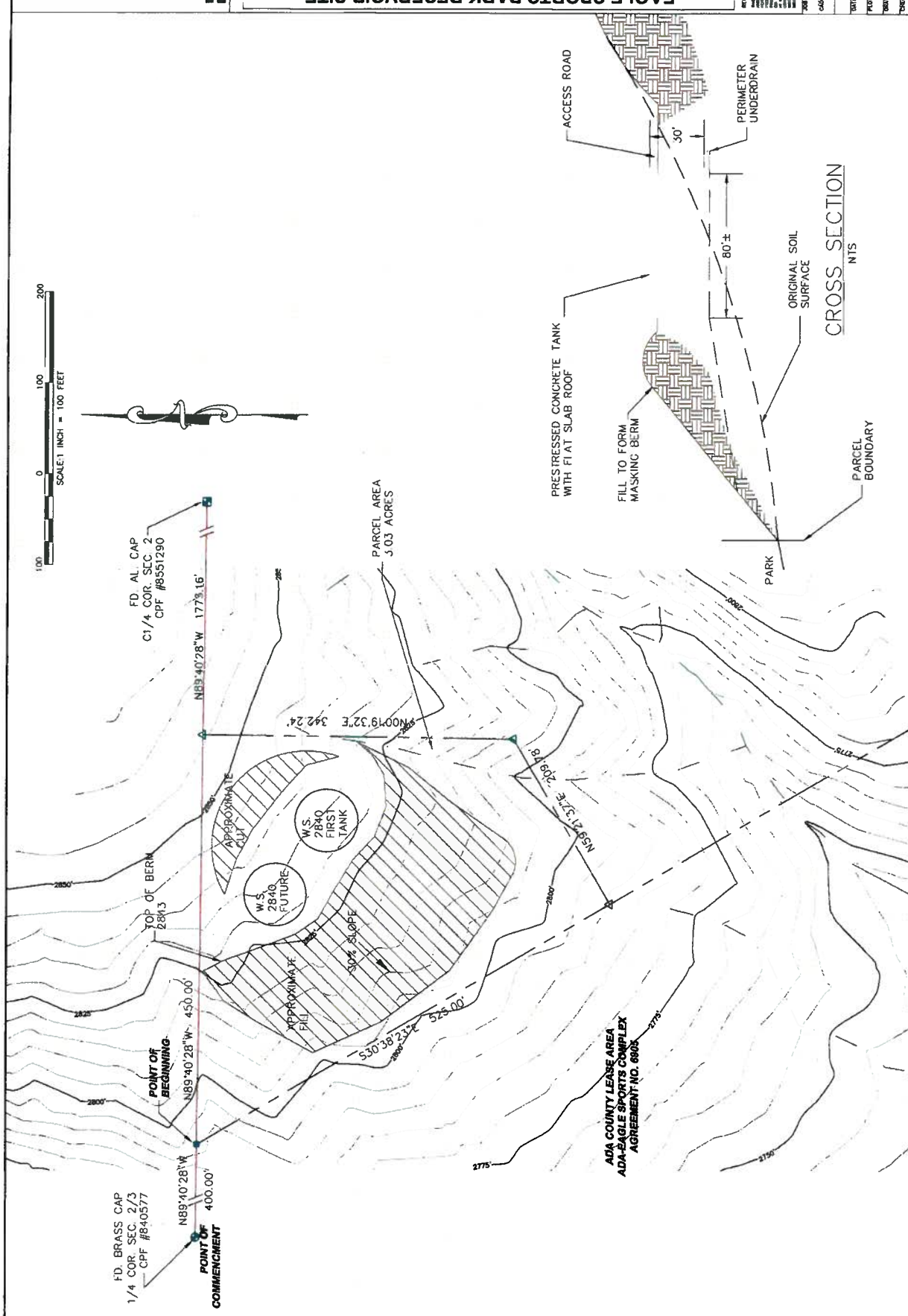
<u>Probable Required Budget</u>	\$1,320,000
--	--------------------

Cost per user/year

Assumptions:

30-year bond, 4.625% interest

- | | |
|-------------------------|---------------------------------|
| • CFR = 0.06229746 | |
| • Annual cost | CFR x \$1,320,000 = \$82,232.64 |
| • Annual cost per user | \$82,232.64 / 1,350 = \$ 60.91 |
| • Monthly cost per user | 60.91 / 12 = \$ 5.08 |



POTABLE WATER RESERVOIR

Probable costs for Water Reservoir Construction

(Based on currently prevailing cost levels, reconnaissance-grade precision)

Assumptions:

- Land may be leased at a nominal rate from BLM.
- All pipeline is in public right-of-way or on BLM lease; therefore no right-of-way acquisition is required.
- Overflow will empty into a natural stream.
- Buried pre-stressed concrete tank will be shielded from view by natural terrain.

Probable Costs:

Phase 1: First 1.5 million-gallon tank, trunk, and overflow lines, site work and access road

• Site work and fence	\$ 80,000
• Road (gravel 20' wide, about 900 ft.)	\$ 20,000
• 1.5 MG Pre-stressed Conc. Tank w/ dome roof	\$ 660,000
• Fill Line 6,000 l.f. 20"	\$ 240,000
• Drain Line 1,000 l.f. 12" & energy dissipater @ outlet	\$ 20,000

Direct Cost Phase 1 **\$ 1,020,000**

• Contingency @ 20%	\$ 204,000
• Design Engineering @ 10%*	\$ 102,000
• Construction Period Engineering @ 6%*	\$ 61,000
• Financial & Legal @ 7%*	\$ 72,000

*Does not include any of cost of negotiating lease with BLM

Phase 1 Probable Budget Requirement **\$1,459,000**

Phase 2: Second 1.5 million-gallon tank (Will be required to serve population in excess of 15,000)

• Site work	\$ 50,000
• 1.5 MG Pre-stressed Conc. Tank w/dome roof	\$ 660,000
• Common service Line 6,000 l.f. 24"	\$ 300,000

Direct Cost Phase 2 **\$1,010,000**

• Contingency @ 20%	\$ 202,000
• Design Engineering @ 8%	\$ 81,000
• Construction Period Engineering @ 6%	\$ 61,000
• Financial & Legal @ 7%	\$ 71,000

Phase 2 Probable Budget Requirement **\$1,425,000**

TOTAL PROJECT PROBABLE COST ***\$2,884,000***

APPENDIX F

Hydraulic Analysis

Tank Volume Calculations

**CITY OF EAGLE WATER SYSTEM
HYDRAULIC MODELING RESULTS**

United Water Labo
J. Reichard/D. Brown

11/23/2004

CONDITION	LH WELL (gpm)	LH WELL (psi)	LH HIGH POINT (gpm)	LH HIGH POINT (psi)	BW HIGH POINT (gpm)	BW HIGH POINT (psi)	F. FEATHER-LH PRV (gpm)	F. FEATHER-LH PRV (H-psi)	F. FEATHER-LH PRV (L-psi)	F. FEATHER-BW PRV (gpm)	F. FEATHER-BW PRV (H-psi)	F. FEATHER-BW PRV (L-psi)	LH-BW PRV (gpm)	LH-BW PRV (H-psi)	LH-BW PRV (L-psi)
BROOKWOOD PRV CONNECTED TO EXISTING 12-INCH WATER MAIN:															
Lexington Pumps Off:															
Static Pressures (Dom. Demands)	0	65.5	0	30.7	0	54.6	312	63.4	63.3	73	75.9	62.0	0	67.3	53.3
1500 gpm fire flow-Brookwood	0	32.2	0	4.6	1500	26.5	1812	47.7	43.0	709	40.2	39.7	864	32.2	31.2
1000 gpm fire flow-Lex Hills	0	51.5	1000	14.2	0	54.3	1312	55.0	52.6	73	61.9	61.7	0	53.2	53.0
Lexington Pumps On:															
Static Pressures (Dom. Demands)	312	80.4	0	45.2	0	54.6	0	64.0	77.6	73	90.7	62.0	0	82.0	53.3
1500 gpm fire flow-Brookwood	864	57.0	0	23.7	1500	35.4	947	59.1	57.9	1271	59.0	51.0	301	58.0	40.0
1000 gpm fire flow-Lex Hills	805	66.6	1000	26.3	0	54.6	507	62.5	62.1	73	76.6	62.0	0	66.7	53.3
BROOKWOOD PRV CONNECTED TO NEW 16-INCH WATER MAIN:															
Lexington Pumps Off:															
Static Pressures (Dom. Demands)	0	65.7	0	30.8	0	54.6	239	63.4	63.3	73	76.4	62.0	0	67.5	53.3
1500 gpm fire flow-Brookwood	0	49.8	0	15.3	1500	35.4	542	48.7	48.3	1272	58.0	50.8	303	50.8	39.7
1500 gpm fire flow-Brookwood	0	59.3	0	24.4	1500	41.2	239	57.0	57.0	1572	64.8	57.8	0	61.1	45.0
w/full tank & 7 psi incr prv setting	0	52.4	1000	14.9	0	54.6	1239	55.1	53.0	73	68.6	62.0	0	54.0	53.3
1000 gpm fire flow-Lex Hills															
Lexington Pumps On:															
Static Pressures (Dom. Demands)	239	80.4	0	45.2	0	54.6	0	64.0	77.6	73	76.9	62.0	0	82.0	53.3
1500 gpm fire flow-Brookwood	536	79.7	0	43.8	1500	35.4	0	56.1	76.2	1276	64.5	51.5	297	79.9	39.7
1000 gpm fire flow-Lex Hills	800	67.1	1000	26.5	0	54.6	438	62.5	62.2	73	75.5	62.0	0	67.1	53.3

Notes: 1) LH = Lexington Hills

2) BW = Brookwood

3) F. Feather-LH PRV = the pressure reducing station located at Floating Feather & Prestwick - feeds the Lexington Hills system

4) F. Feather-BW PRV = the pressure reducing station located at Floating Feather & Thunderbird - feeds the Brookwood system

5) LH-BW PRV = the pressure reducing station located on Daylesford between Brookwood #9 and Lexington Hills

Eagle Water : Amended Master Plan

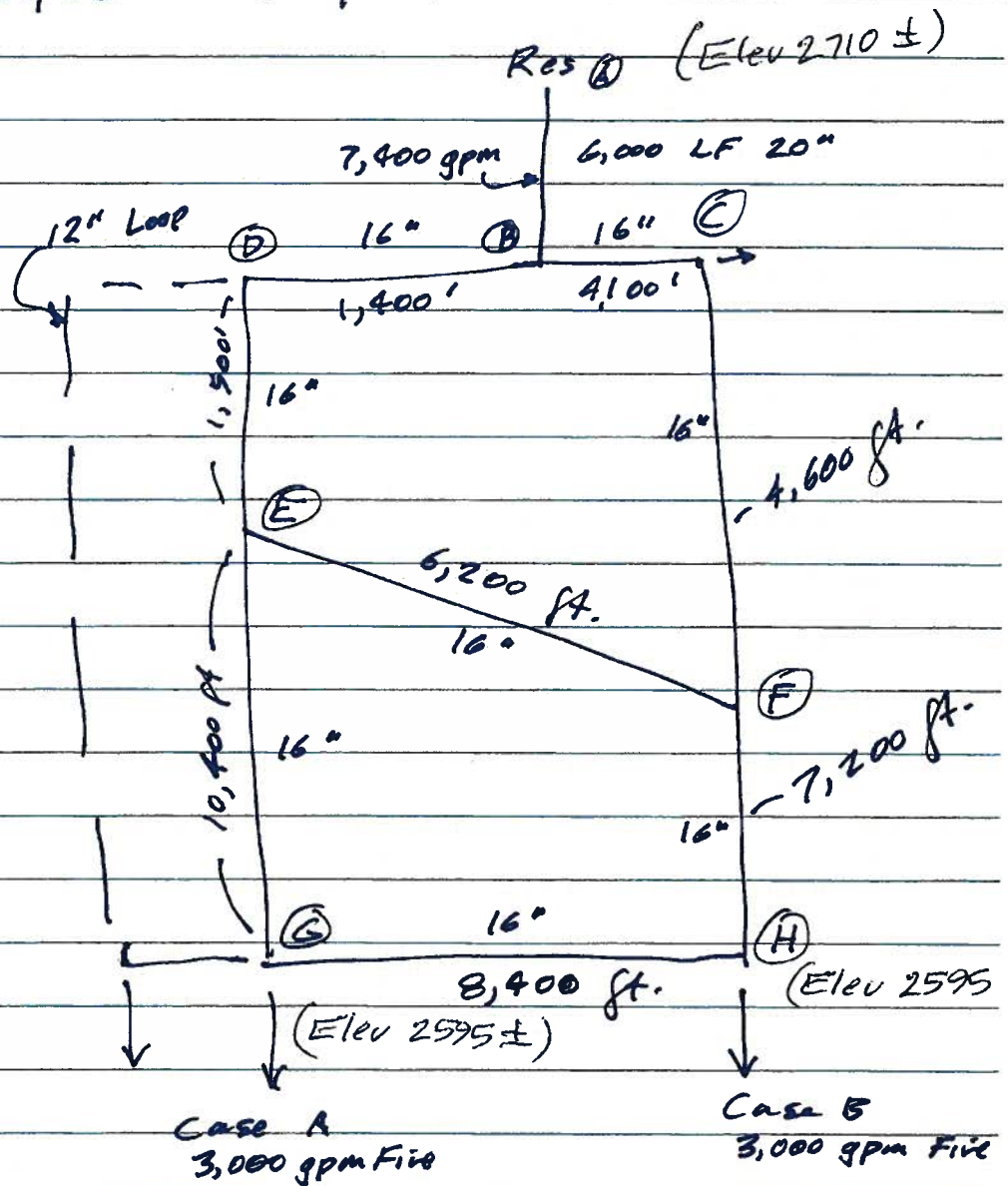
Fire Flow Maximum

Eagle Western Expansion Area

KR
EG 051404
12/21/04

FFM 1 /

Build-out situation ; approximate fire
flow peak - hydraulic analysis of
major system loops.



Eagle Water: Amended Master Plan

Fire Flow Maximum

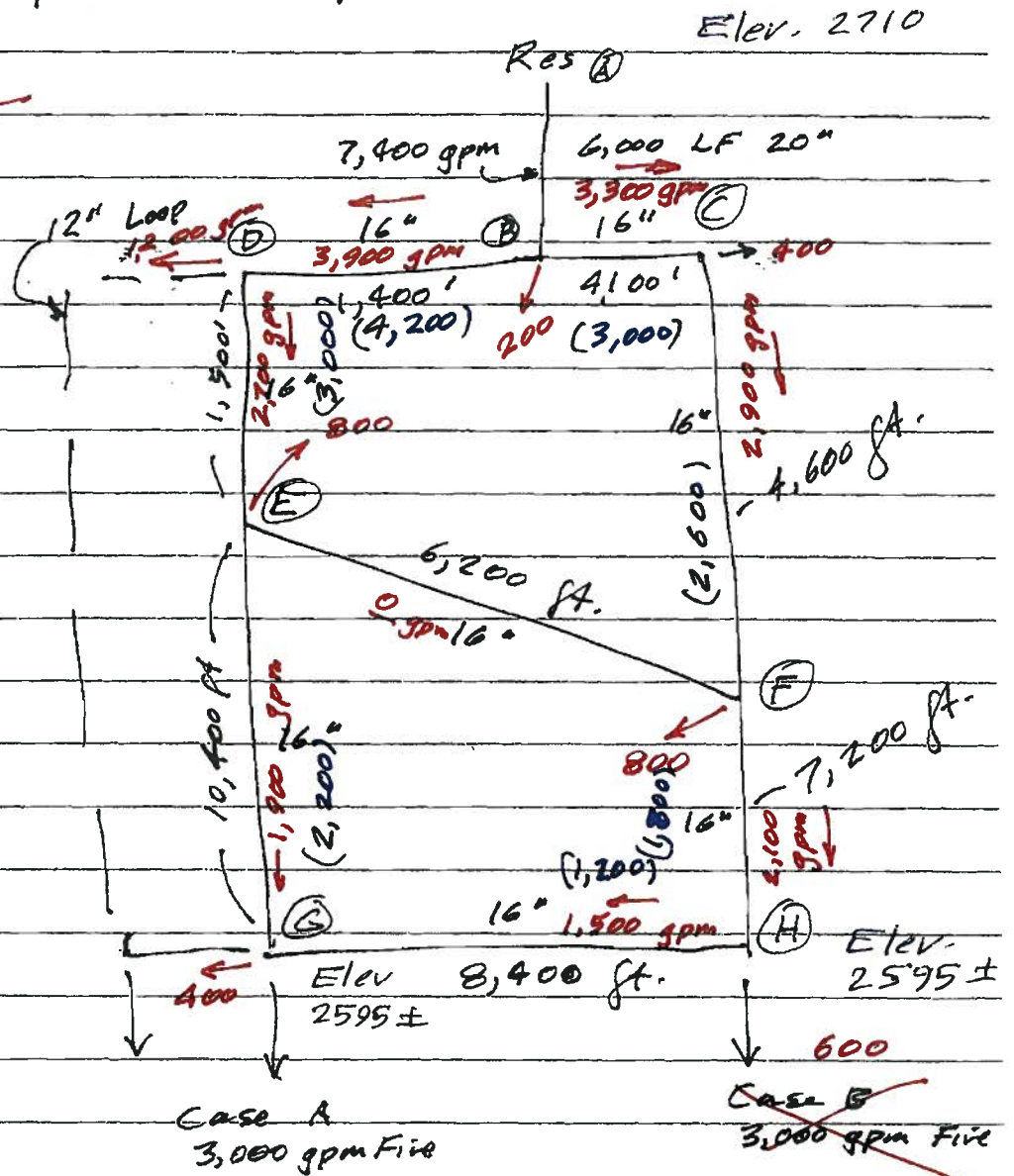
Eagle Western Expansion Area

KR
EG 031404
12/21/04

FFM ~~4~~ 2/

Build-out situation; approximate fire flow peak - hydraulic analysis of major system loops.

Case A



Eagle Water : Amended Master Plan

Fire Flow Maximum Conditions

Eagle Western Expansion Area

Check Balance

KK
EG 051404

12/21/04

FFM 3/

Case A, Initial Flow Distribution Assumpti

West Path (note: $h_L = \frac{L Q^{1.85}}{0.211 C^{1.85} D^{4.87}}$)

Point	h_L	Σh_L	h_L'	$\Sigma h_L'$
A	25.2	25.2	25.2	25.2
B	8.5	33.7	9.8	35.0
D	4.6	38.3	5.6	40.6
E	16.7	55.0	21.9	62.5
G				

East Path

A	25.2	25.2	25.2	25.2
B	18.3	43.5	15.3	40.5
C	16.1	59.6	13.2	53.7
F	13.9	73.5	10.5	64.2
H	8.7	82.2	5.8	70.0
G				

HGL (West path) =
2710 - 8/2 = 2628'

$\therefore \Sigma h_L < 70.0$

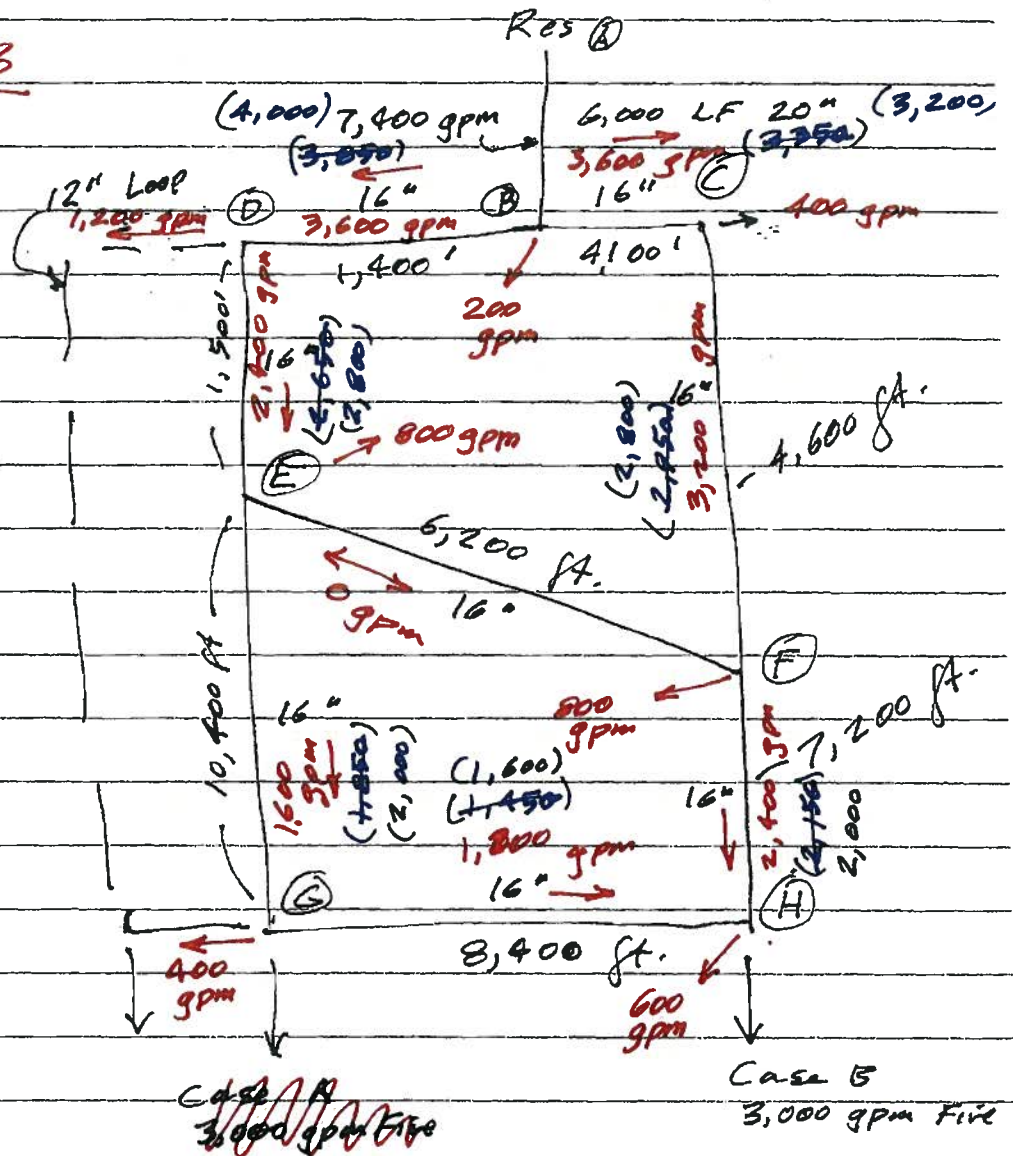
HGL = 2640

Residual = $\frac{2640 - 2595}{2.31}$

= 19.5 psi $\approx$ 20
OK

FFM 4/

Case B



3,600 - First assumption
(3,850) - Second assumption

- Eagle Water & Expanded Master Plan
Fire Flow Maximum Conditions
Eagle Western Expansion Area

KR
EG 051404
12/21/04
FEM 5/

Check Network Balance, Case B

(See FFM4 for initial & adjusted flow assumptions)

INITIAL			ADJUSTED	
Point	West Path h_L	Σh_L	h_L	Σh_L
(A)	25.2	25.2	25.2	25.2
(B)	7.4	32.6	8.9 8.3	34.1 33.8
(D)	3.7	36.3	5.0 4.5	39.1 38.3
(E)	12.2	48.5	18.4 15.9	57.5 54.2
(G)	5.8	54.3	9.8 8.2	67.3 62.4
(H)				
East Path				
(A)	25.2	25.2	25.2 25.2	25.2 25.2
(B)	21.5	46.7	17.3 18.8	42.5 44.0
(C)	19.4	66.1	15.1 16.7	57.6 60.7
(F)	17.8	83.9	12.7 14.5	70.3 75.2
(H)				
$67.3 \text{ vs } 70.3: \text{OK} \pm$ $\text{Residual } P \geq \frac{(2710 - 70 - 2500)}{2.31}$ $= 19.5 \approx 20 \text{ OK}$				

Eagle Water = Amended Master Plan
System Flows (Fire)

KR
EG 051404
2/9/04
FFM 61

Hypothetical Fire Flow on Lateral

Extreme case: 8" lateral spans
7,000 ft. between 16" mains,
fire demand = 1,800 gpm @
mid-point

Each branch $Q = 900 \text{ gpm} \pm$

$$h_L = \frac{L Q^{1.85}}{0.211 C_{hw}^{1.85} D^{4.87}} \quad \text{(Solution of Hazen-Williams)}$$

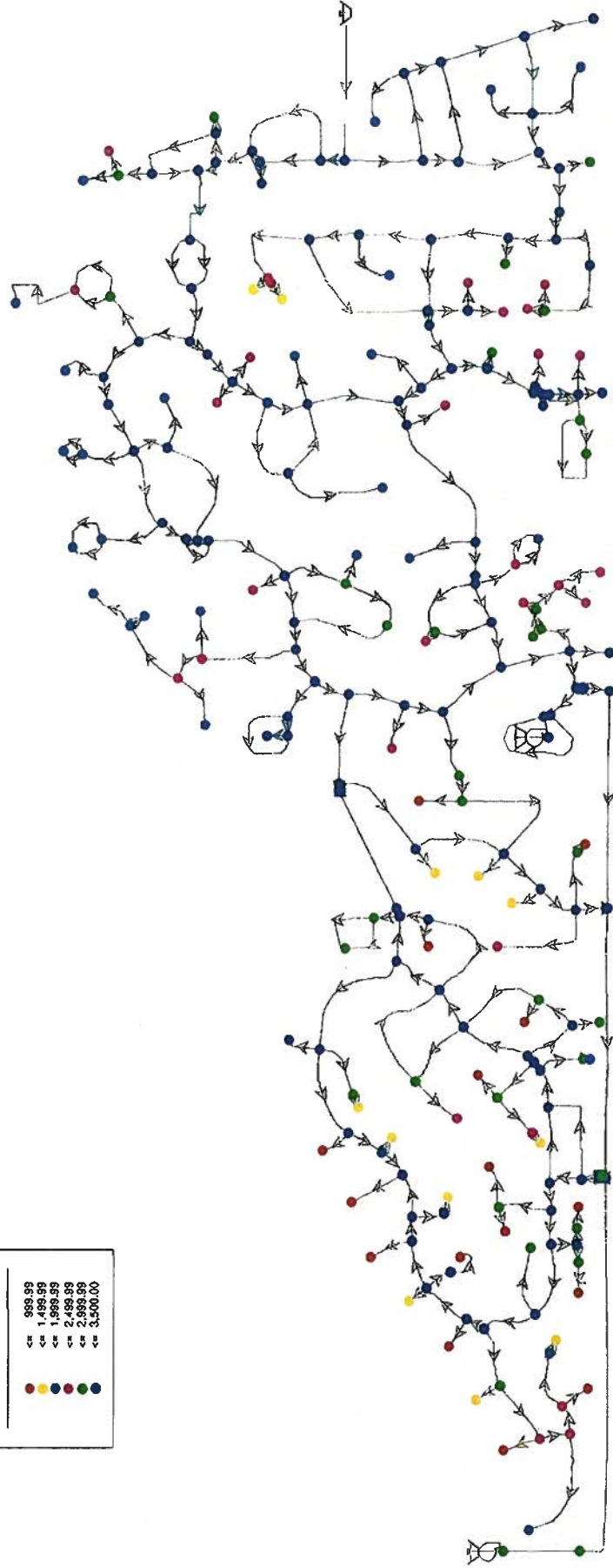
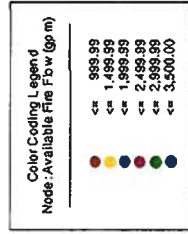
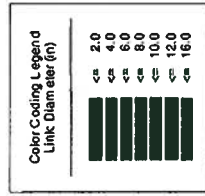
$$L = 3,500, \quad Q = \frac{900}{450} = 2.0; \quad C_{hw} = 150, \\ D = 0.667$$

$$h_L = 40.5 \text{ ft} = 17.5 \text{ psi drop} \\ \text{in } 8" \text{ main lateral}$$

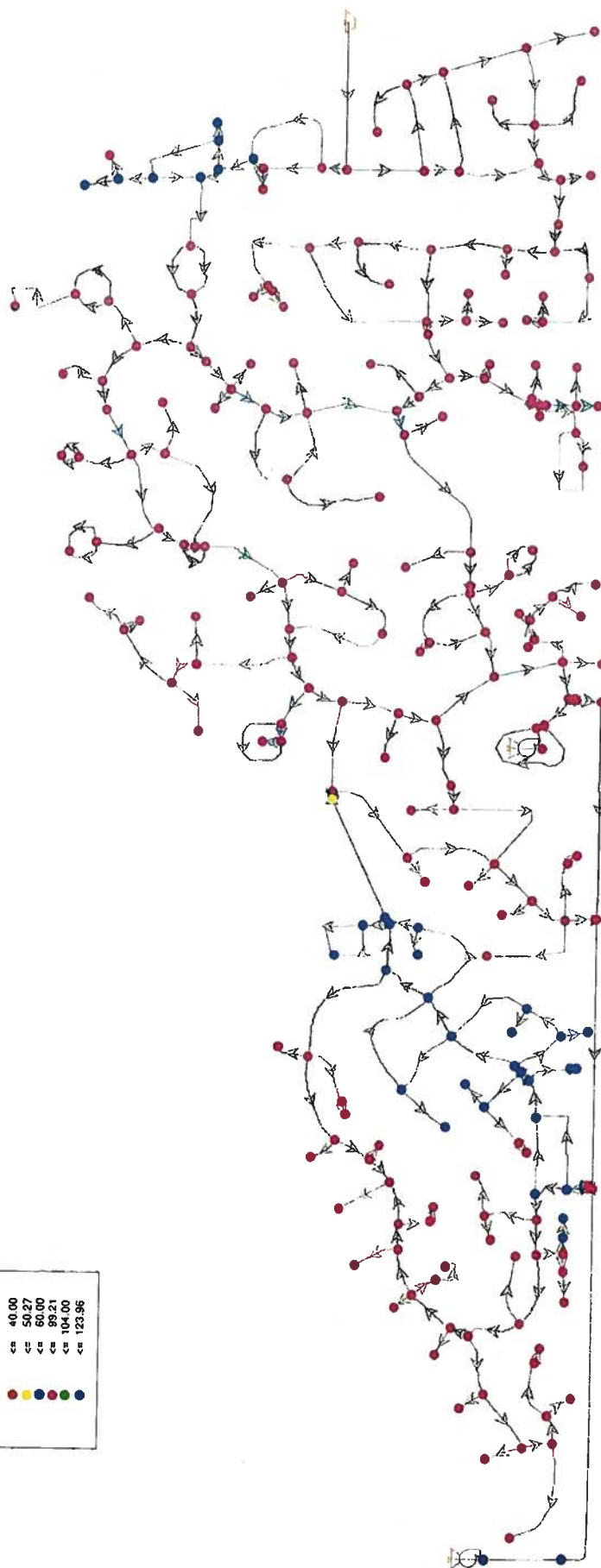
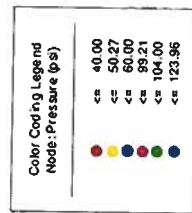
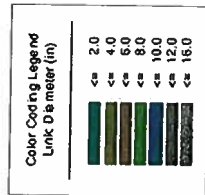
Drop to ends of lateral will be
about $\left(\frac{6200}{7400}\right)^{1.85}$ of the equivalent drop
in Case B. Point G is extreme
case: overall ~~pressure~~ ^{head} drop $= 17.5 + \left(\frac{6200}{7400}\right)^{1.85} \times 40.5$
 $= 75.5 \text{ ft.}$
 $= 33 \text{ psi}$

OK for original pressure 55 psi or
more (true for southern part of
service area — and ~~the~~ pressure drop
is much less in northern part of
service area. Hence, 8 inch laterals
will be adequate in general for
fire flows in incidental (R-1 & R-2) zones.)

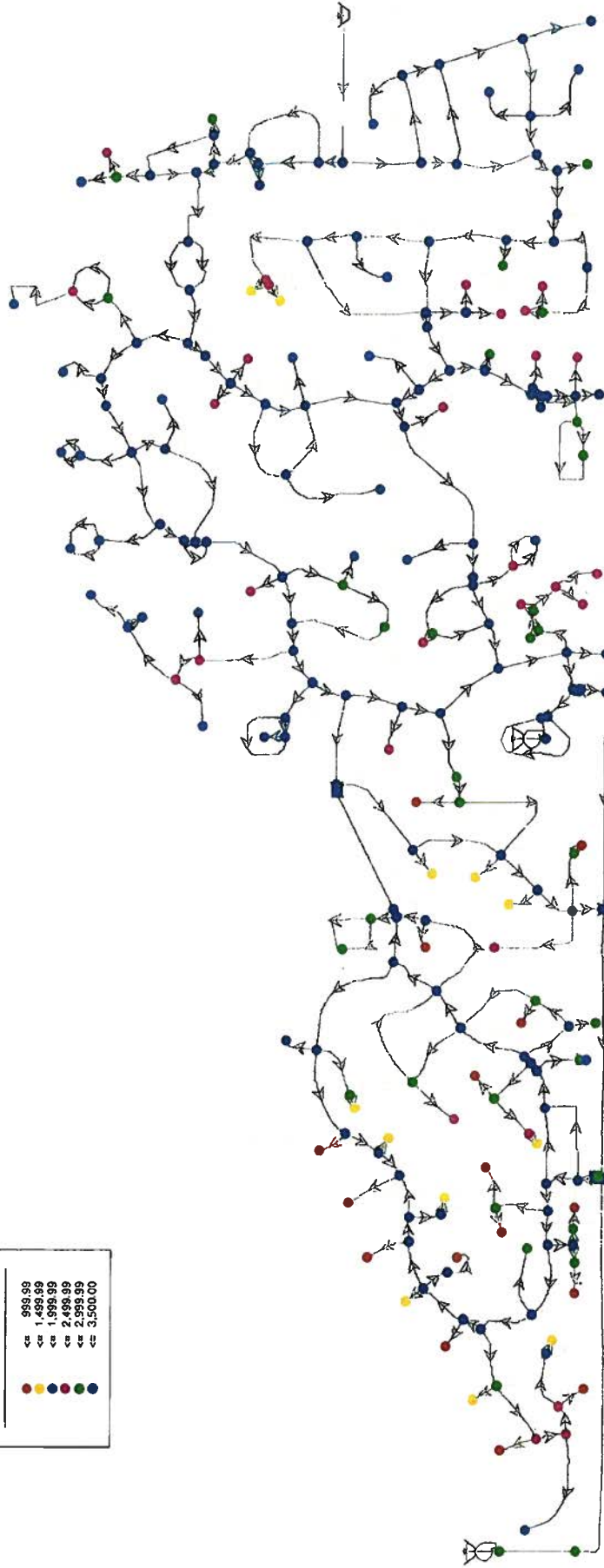
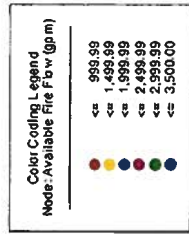
Scenario: 2842' Tank, Pumps Off (fire flow analysis)



Scenario: 2852' Tank, Pumps Off (max day pressure analysis)



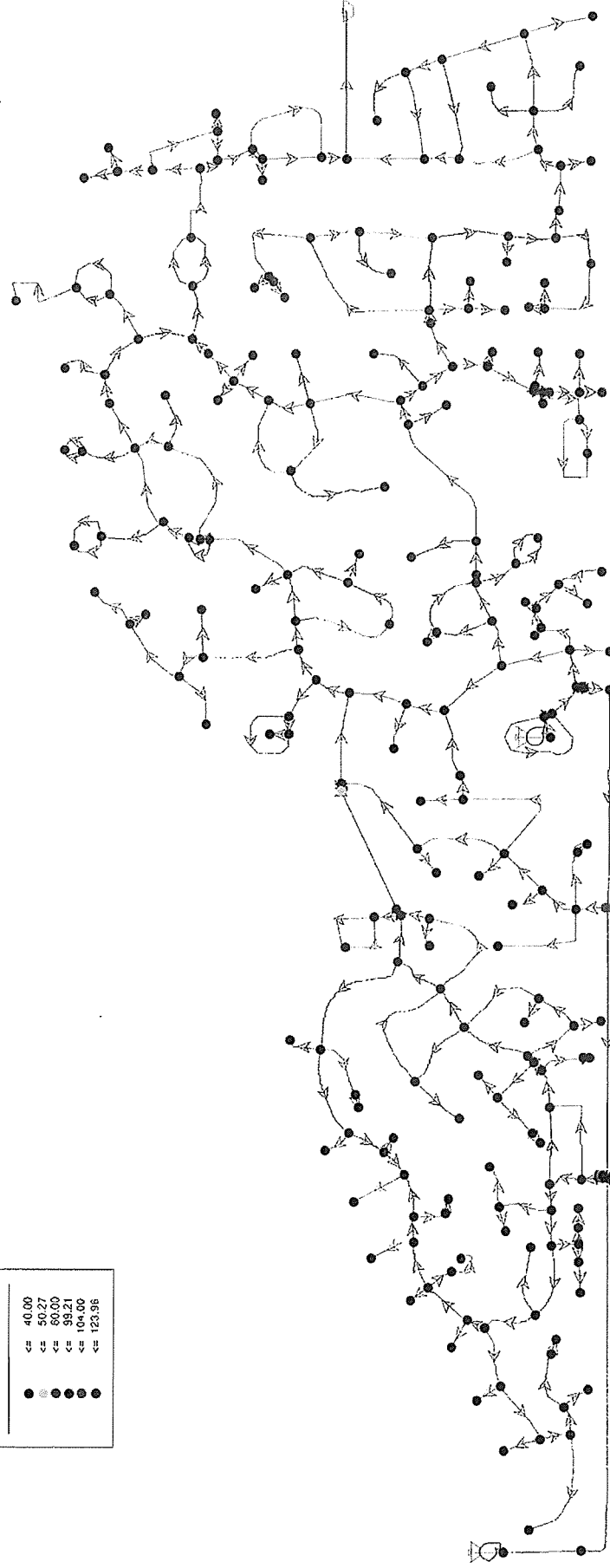
Scenario: 2842' Tank, Pumps Off (fire flow analysis)



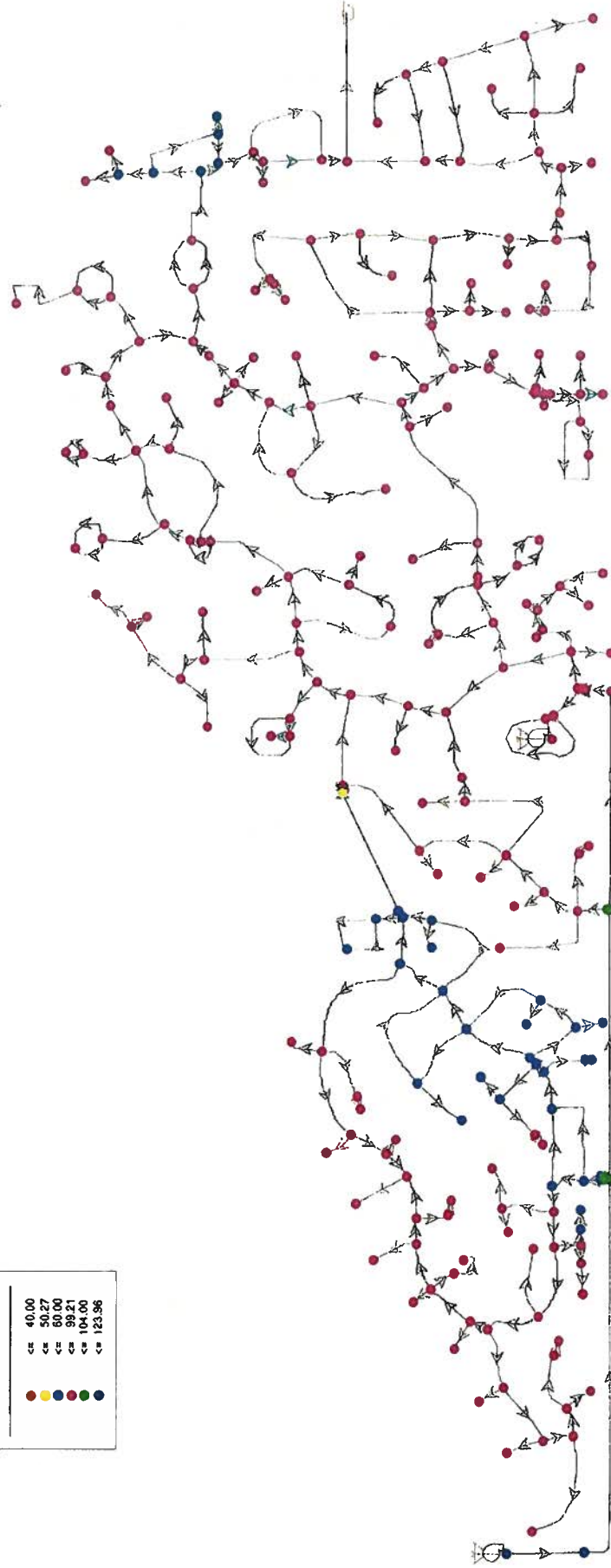
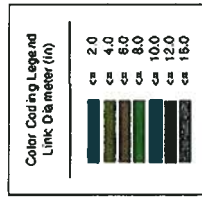
Scenario: 2852' Tank, 700 gpm from Lexington Hills well #1 (max day pressure analysis)

Color Coding Legend Link Diameter (in)	
	<= 2.0
	<= 4.0
	<= 6.0
	<= 8.0
	<= 10.0
	<= 12.0
	<= 16.0

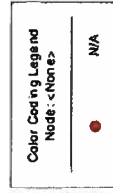
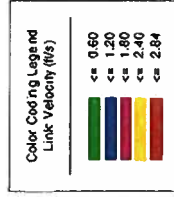
Color Coding Legend Node Pressure (psi)	
	<= 40.00
	<= 50.27
	<= 60.00
	<= 99.21
	<= 104.00
	<= 123.96



Scenario: 2852' Tank, 1000 gpm from Brookwood well (max day pressure analysis)



Scenario: 2852' Tank, 1000 gpm from Brookwood well (max day pressure analysis)



File Location	Levington Hills Well Status	Floating Feather Booster Status	File Flow @ 20 psi (gpm)	File Flow @ 1000 gpm?	Max Customer Junction Pressure (psi)	Min Customer Junction Pressure (psi)
None	On	On	N/A	N/A	89.0	43.1
None	Off	Off	N/A	N/A	89.0	43.1
None	On	On	N/A	N/A	78.2	32.4
None	Off	Off	N/A	N/A	71.7	25.9
NE Brookwood	On	On	2685.1	Yes	57.9	20.0
NE Brookwood	Off	Off	2219.5	Yes	52.8	5.8
NE Brookwood	On	On	2145.1	Yes	52.1	12.4
NE Brookwood	Off	Off	1537.8	Yes	47.3	-1.2
NE Levington Hills	On	On	1887.4	Yes	75.9	20.0
NE Levington Hills	Off	Off	1222.8	Yes	70.4	20.0
NE Levington Hills	On	On	1563.6	Yes	61.5	20.0
NE Levington Hills	Off	Off	514.0	No	69.2	20.0
NW Levington Hills	On	On	1514.0	Yes	74.2	20.0
NW Levington Hills	Off	Off	1307.1	Yes	69.2	20.0
NW Levington Hills	On	On	1380.3	Yes	69.2	20.0
NW Levington Hills	Off	Off	994.5	No	63.9	12.2
SE Levington Hills	On	On	2953.2	Yes	69.2	16.2
SE Levington Hills	Off	Off	2126.4	Yes	69.2	8.0
SE Levington Hills	On	On	2390.6	Yes	69.2	8.2
SE Levington Hills	Off	Off	1480.5	Yes	82.4	2.3
SW Brookwood	On	On	1715.8	Yes	73.1	20.0
SW Brookwood	Off	Off	1894.8	Yes	59.8	16.4
SW Brookwood	On	On	1880.4	Yes	61.7	20.0
SW Brookwood	Off	Off	1438.5	Yes	49.8	1.5
SW Levington Hills	On	On	1704.2	Yes	69.2	20.0
SW Levington Hills	Off	Off	1495.0	Yes	69.2	19.1
SW Levington Hills	On	On	1554.7	Yes	69.2	20.0
SW Levington Hills	Off	Off	1168.2	Yes	63.9	8.4
Brookwood PRV Connected To 16" Floating Feather Pipe						
None	On	On	N/A	N/A	89.0	43.1
None	Off	Off	N/A	N/A	89.0	43.1
None	On	On	N/A	N/A	78.3	32.5
None	Off	Off	N/A	N/A	71.9	25.1
NE Brookwood	On	On	2782.5	Yes	77.6	20.0
NE Brookwood	Off	Off	2666.7	Yes	57.9	6.6
NE Brookwood	On	On	2787.4	Yes	72.1	20.0
NE Brookwood	Off	Off	2118.5	Yes	52.6	-3.0
NE Levington Hills	On	On	1908.1	Yes	76.3	20.0
NE Levington Hills	Off	Off	1138.3	Yes	70.7	20.0
NE Levington Hills	On	On	1618.7	Yes	72.0	20.0
NE Levington Hills	Off	Off	537.6	No	69.2	20.0
NW Levington Hills	On	On	1821.5	Yes	74.6	20.0
NW Levington Hills	Off	Off	1314.6	Yes	69.2	20.0
NW Levington Hills	On	On	1385.7	Yes	69.2	20.0
NW Levington Hills	Off	Off	1181.0	Yes	69.2	12.5
SE Levington Hills	On	On	2381.8	Yes	69.2	16.6
SE Levington Hills	Off	Off	2142.9	Yes	69.2	8.2
SE Levington Hills	On	On	2406.4	Yes	69.2	9.7
SE Levington Hills	Off	Off	1483.3	Yes	69.2	2.6
SW Brookwood	On	On	1717.3	Yes	68.5	20.0
SW Brookwood	Off	Off	1714.8	Yes	88.4	20.0
SW Brookwood	On	On	1717.3	Yes	77.8	20.0
SW Brookwood	Off	Off	1688.3	Yes	59.1	8.0
SW Levington Hills	On	On	1713.8	Yes	69.2	20.0
SW Levington Hills	Off	Off	1505.0	Yes	69.2	19.4
SW Levington Hills	On	On	1570.7	Yes	69.2	20.0
SW Levington Hills	Off	Off	1186.0	Yes	69.2	3.7

Storage Increments:

- Increment 1: $30 \times 980 = 29,400$ gal.
 $3 \times 2,200 \times 10.44 \text{ gal/ft}^* = 68,930$ gal. (*16")
USE 70,000 gal.
 - Increment 2: $941,000 \times 0.225 = 211,275$
USE 210,000 gal.
 - Increment 3: $240 \times 653 = 156,720$
USE 160,000 gal.
 - Increment 4: $240 \times 1,500 = 360,000$
USE 360,000 gal.
- Sum of Increments 1-4 = 800,000 gal.
- Increment 5: 10 % of SUM (1-4) = 80,000 gal.
 - Increment 6: 5 % of TOTAL = $(0.05/0.95) \times 880,000$
= 46,316 gal
USE 50,000 gal.

Total Required Storage = 930,000 gal.

Select next larger standard size = 1,000,000 gal.

SUMMARY

Cycle reserve	70,000 gal.
Equalizing reserve	210,000 gal.
Concurrent reserve	160,000 gal.
Fire reserve	360,000 gal.
Remnant reserve	80,000 gal.
Sediment reserve	<u>50,000 gal.</u>
	930,000 gal.

Round to 1,000,000 gallons

EAGLE AMENDED WATER MASTER PLAN
Sports Park Reservoir Recommendation
EG 051404
Revised Per Demand Findings
12/14/04

Reservoir Volume Requirement – including volume increments:

- 1. Cycle on/off reserve**
To equal the greater of ½ hour at peak hour flow, or 3 times volume of reservoir feed main (from connection to distribution grid to reservoir).
- 2. Flow equalization reserve**
Adequate to equalize flow over peak day. Equal to 0.225 times peak day total use.
- 3. Concurrent flow reserve**
Equal to peak day flow (for service during fire) for duration of assumed fire.
- 4. Fire flow reserve**
Equal to required fire flow for most demanding zone times required durations for same zone. For this system, 1,500 gpm for 4 hours.
- 5. Post-emergency reserve**
Equal to 10% of the sum of the first four items.
- 6. Sediment capture reserve**
Equal to 5% of total tank volume.

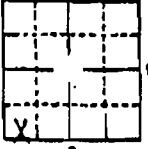
Quantity Basis:

- Peak Day Volume 941,000 gal.
- Peak Day Mean Flow = 653 gpm.
- Fire Flow = 1,500 gpm.
- Fire Duration = 4 hours (240 minutes)

APPENDIX G

Water Rights Documents

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTState law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.USE TYPEWRITER OR
BALLPOINT PENaka Lexington Hills #1
(030001)

1. WELL OWNER Name <u>Floating Feather Hills, Inc.</u> Address <u>2417 Bank Drive-Suite 101</u> <u>Boise, ID 83705</u> Owner's Permit No. <u>63-11413</u>	7. WATER LEVEL Static water level <u>6.8</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ °F. Quarterly _____ Describe strata or temperature zones below																																																																																																																																																																																																																
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6. LOCATION OF WELL Sketch map location <u>must</u> agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Ada</u> SHA <u>Ada</u> Sec. <u>1</u> T. <u>4N</u> S. <u>1E</u> W. <u>1E</u>	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were compiled with at the time the rig was removed. PETE COPE DRILLING CO., INC. 213 Firm Name _____ Firm No. _____ Address <u>8505 W. Chinden Blvd.</u> <u>Meridian, ID</u> Date _____ Signed by (Firm Official) _____ and (Operator) _____																																																																																																																																																																																																																

Form 230-7
8/00

LEXINGTON HILLS INC. (030001)

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

USE TYPEWRITER OR
BALLPOINT PEN

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name: <u>LEXINGTON HILLS INC.</u> Address: <u>2417 BANK DR BOISE ID 83705</u> Drilling Permit No. <u>63-92-W-170</u> Water Right Permit No. <u>63-11413</u>	7. WATER LEVEL Static water level <u>90</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ of. Quality _____ <i>Describe stratum or temperature zones below.</i>																																																																																																																																																																		
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Bore Diam.	Depth		Material	Water Yes/No																																																																																																																																																															
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28	0	4	TOPSOIL																																																																																																																																																																
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	235	304	SANDY GREY CLAY																																																																																																																																																																
	304	353	FINE TO CRSE SAND																																																																																																																																																																
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	598	615	GREY CLAY																																																																																																																																																																
4. METHOD DRILLED <u>REVERSE ROTARY</u> ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____	10. Work started <u>4/14/92</u> finished <u>4/14/92</u>																																																																																																																																																																		
5. WELL CONSTRUCTION <u>SEE ATTACHED</u> Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ Thickness _____ Diameter _____ Inches + _____ feet To _____ feet Was casing drive shoe used? ☐ Yes ☒ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun Size of perforation _____ inches by _____ inches Number _____ From _____ To _____ _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>ROSCOE MOSS</u> Type <u>STAINLESS</u> Model No <u>HEAVY</u> Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No Size of gravel <u>3/8"</u> Placed from <u>115</u> feet to <u>615</u> feet Surface seal depth <u>15</u> Material used in seal: ☒ Cement grout ☐ Bentonite ☐ Puddling clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth ☐ Solvent Method of joining casing: ☐ Threaded ☒ Welded ☐ Weld ☐ Cemented between strata Describe access port <u>2" PIPE</u>	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>PETE COPE DRILLING</u> Firm No. <u>213</u> Address <u>505 W CHINDEN</u> Date <u>4/14/92</u> Signed by (Firm Official) <u>Joseph Jones</u> and (Operator) <u>Joseph Jones</u>																																																																																																																																																																		
6. LOCATION OF WELL Sketch map location <u>must</u> agree with written location. Subdivision Name _____ Lot No. _____ Block No. _____ County <u>ADH</u> NW 1/4 Sec. <u>3</u>, T. <u>4N</u> R. <u>1E</u> W. <u>0</u>	USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT																																																																																																																																																																		

LEXINGTON HILLS INC
2417 DANK DRIVE
BOISE ID 83705
Permit# 63-92-W-170

C.
pg. 2

"16" casing record .250 wall welded			
1.5	-	499	500.5
509	-	519	10
529	-	554	25
574	-	592	18
602	-	612	10

563.5 total casing

16" Screen record .30 slot Stainless Steel Roscoe Moss Continuous wire.			
499	-	509	10
519	-	529	10
554	-	574	20
592	-	602	10

50 total screen

613.5 total casing + screen

4N 1E Sic 3

RECEIVE

JAN 19 2005

FORM 202
12/99

WATER RESOURCES
WESTERN REGION

Application #1

Ident. No. 63-32090

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of Applicant City of Eagle Phone (208) 939-6813
Mailing address PO Box 1520 EAGLE, ID 83616
2. Source of water supply Groundwater which is a tributary of _____
3. Location of point of diversion is Township 4N Range 1W Sec. 10, in the NW $\frac{1}{4}$,
NW $\frac{1}{4}$, _____ Govt. Lot _____, B.M., ADA County;
additional points of diversion if any: T. 4n, R. 1W, S. 10, NW $\frac{1}{4}$ of NE $\frac{1}{4}$ and T. 4N, R. 1W, S. 11, SE $\frac{1}{4}$ of NW $\frac{1}{4}$
4. Water will be used for the following purposes:
Amount 4.9 cfs for Municipal purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated is (a) 4.9 and/or (b) _____
cubic feet per second acre feet per annum
6. Proposed diverting works:
a. Describe type and size of devices used to divert water from the source Three public water system wells with line shaft turbine pumps and municipal distribution system
b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet
c. Proposed well diameter is 16 inches; proposed depth of well is 500 feet
d. Is ground water with a temperature of greater than 85°F being sought? No
e. If well is already drilled, when? _____; Drilling firm _____;
Well was drilled for (well owner) _____; Drilling Permit No. _____
7. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
a. Hydropower; show total feet of head and proposed capacity in kW. _____
b. Stockwatering; list number and kind of livestock. _____
c. Municipal; show name of municipality. City of Eagle
d. Domestic; show number of households. _____
e. Other; describe fully. _____

9. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

Total number of acres to be irrigated _____

10. Describe any other water rights used for the same purposes as described above. _____

11. a. Who owns the property at the point of diversion? _____

b. Who owns the land to be irrigated or place of use? _____

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: Agreement between developer and City of Eagle to dedicate well

12. Remarks: lot to City of Eagle Municipal Water System.

13. MAP OF PROPOSED PROJECT REQUIRED - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

BE IT KNOWN that the undersigned hereby makes this application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Nancy L. Merrill
Signature of Applicant (and title, if applicable)
(MAYOR)

Received by DB Date 1-19-05 Time 3:25 PM Preliminary check by 6
Fee \$ 410- Received by DB # W032530 Date 1-19-05
Publication prepared by sk Date 9-21-28-05 Published in _____
Publication approved sk Date 5-6-05 THE IDAHO STATESMAN

RECEIVED

Application No. 2

FORM 202
12/89

JAN 19 2005

Ident. No. 63-32089

WATER RESOURCES
WESTERN REGION

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

AMENDED

1. Name of Applicant City of Eagle Phone (208) 939-6813

Mailing address PO Box 1520 EAGLE, ID 83616

C.D. 3/11/05

2. Source of water supply Groundwater which is a tributary of _____

CD 5/5/05

3. Location of point of diversion is Township 4N Range 1W Sec. 11 in the NW $\frac{1}{4}$,
SE $\frac{1}{4}$ (Wells) $\frac{1}{4}$, Govt. Lot _____, B.M., ADA County;

additional points of diversion if any: T. 4N, R. 1W, S. 10 NW $\frac{1}{4}$ & NE $\frac{1}{4}$, T. 4N, R. 1W, S. 11, SE $\frac{1}{4}$, NW $\frac{1}{4}$ and T. 4N, R. 1W, S. 10, NW $\frac{1}{4}$, NW $\frac{1}{4}$

4. Water will be used for the following purposes:

Amount 4.0 cfs for Municipal purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated is (a) 4.0 and/or (b) _____
cubic feet per second acre feet per annum

6. Proposed diverting works:

a. Describe type and size of devices used to divert water from the source Public water system well
(Well No. 4), pump and municipal distribution system.

b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total
reservoir capacity _____ acre-feet

c. Proposed well diameter is 16 inches; proposed depth of well is 500 feet

d. Is ground water with a temperature of greater than 85°F being sought? _____

e. If well is already drilled, when? _____; Drilling firm _____

Well was drilled for (well owner) _____; Drilling Permit No. _____

7. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year)

8. Description of proposed uses (if irrigation only, go to item 9):

a. Hydropower; show total feet of head and proposed capacity in kW. _____

b. Stockwatering; list number and kind of livestock. _____

c. Municipal; show name of municipality. City of Eagle

d. Domestic; show number of households. _____

e. Other; describe fully. _____

9. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

Total number of acres to be irrigated _____

10. Describe any other water rights used for the same purposes as described above. _____

11. a. Who owns the property at the point of diversion? _____

b. Who owns the land to be irrigated or place of use? _____

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: Agreement between developer and City of Eagle to dedicate well

12. Remarks: lot to City of Eagle Municipal Water System.

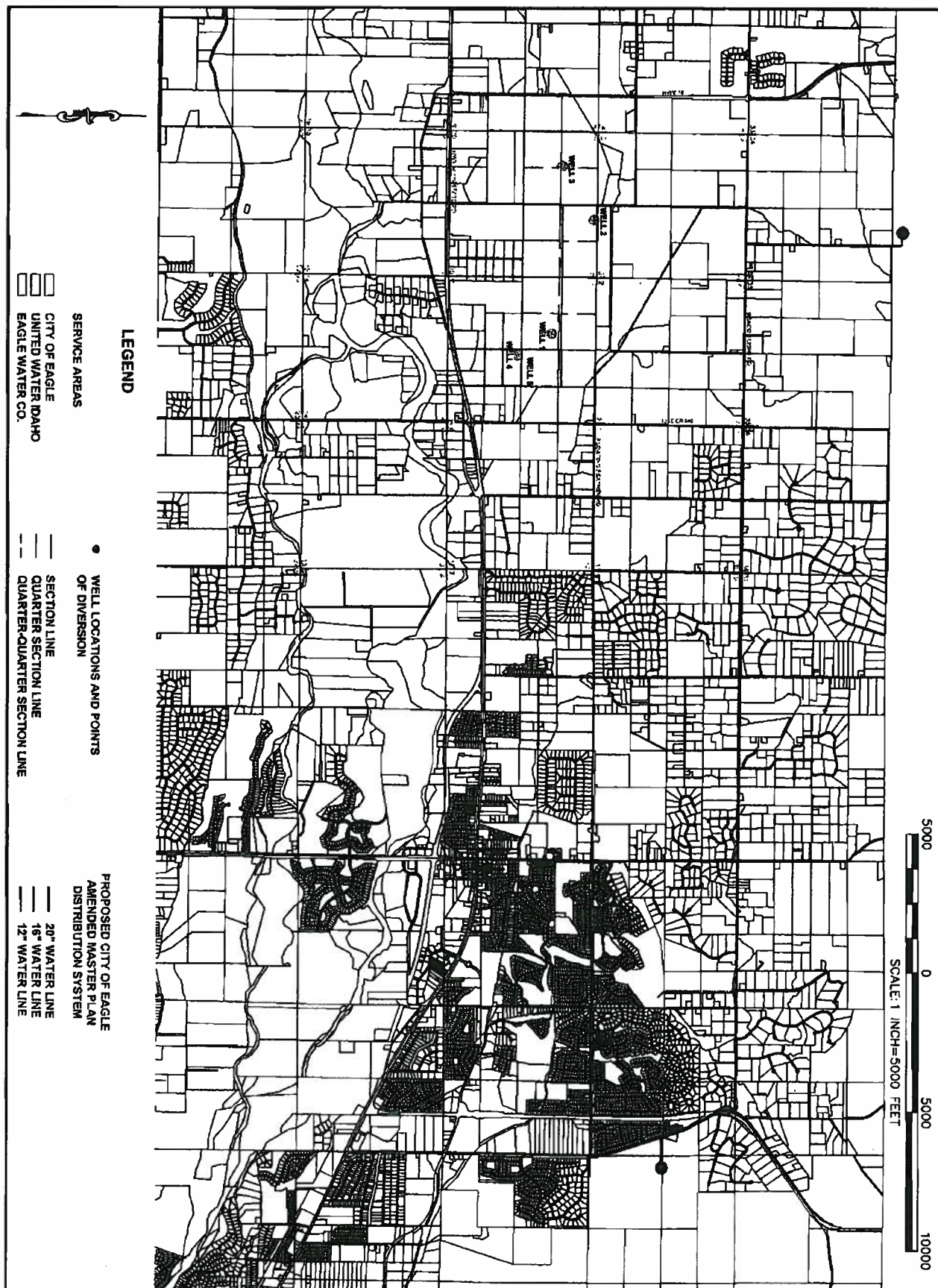
13. MAP OF PROPOSED PROJECT REQUIRED - Attach an 8 1/2"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

BE IT KNOWN that the undersigned hereby makes this application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Signature of Applicant (and title, if applicable)

Received by DB Date 1-19-05 Time 3:25 PM Preliminary check by 6
 Fee \$ 410- Recelpted by DB # W032531 Date 1-19-05
 Publication prepared by dk Date 4-21-05 Published in THE IDAHO STATESMAN
 Publication approved dk Date 5-10-05

\$50 paid 5/5/05 to add well in NWSE 511, receipt W032895.



CITY OF EAGLE
 UNITED WATER IDAHO
 EAGLE WATER CO.

LEGEND

• WELL LOCATIONS AND POINTS OF DIVERSION
 — SECTION LINE
 — QUARTER SECTION LINE
 - - QUARTER-QUARTER SECTION LINE

PROPOSED CITY OF EAGLE AMENDED MASTER PLAN DISTRIBUTION SYSTEM
 — 20" WATER LINE
 — 16" WATER LINE
 — 12" WATER LINE

5000 0 5000 10000
 SCALE: 1 INCH=5000 FEET

HOLLADAY ENGINEERING CO.
 ENGINEERS • CONSULTANTS
 32 N. MAIN P.O. BOX 235 PAYETTE, ID 83661
 (208) 642-3304 • FAX# (208) 642-2159
 EMAIL: holladay@mln.net

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**CITY OF EAGLE
 WATER RIGHT APPLICATION MAP**

MAP NO. EG 112404
 CAD: JLM
 DATE: 3/29/05
 PLOTTER: 3/29/05
 DRAWN BY: JLM
 CHECKED BY: CHD

APPLICATION MAP LAYOUT

Water Right Report

Page 1 of 1



IDAHO DEPARTMENT OF WATER RESOURCES
Water Permit Report

03/02/2005

WATER RIGHT NO. 63-11413

Owner Type	Name and Address
Current Owner	CITY OF EAGLE PO BOX 1520 EAGLE, ID 83616 (208)939-6813
Attorney	CITY OF EAGLE PO BOX 1520 EAGLE, ID 83616 (208)939-6813
Original Owner	FLOATING FEATHER HILLS INC 2417 BANKS DR STE 101 BOISE, ID 83705 (208)343-6500
Original Owner	TREASURE VALLEY VILLAGE LIMITED PARTNERSHIP 4720 EMERALD BOISE, ID 83706 (208)336-3393

Priority Date: 04/02/1991

Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
MUNICIPAL	1/01	12/31	3.15 CFS	540 AFA
Total Diversion			3.15 CFS	

Water Right Report

Page 2 of 3

Location of Point(s) of Diversion:

GROUND WATER	NWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSW	Sec. 04	Township 04N	Range 01E	ADA County
GROUND WATER	NESE	Sec. 04	Township 04N	Range 01E	ADA County

Place(s) of use: No POUs found for this right

Conditions of Approval:

1.	004	The issuance of this right does not grant any right-of-way or easement across the land of another.
2.	01M	After specific notification by the department, the right holder shall install a suitable measuring device or shall enter into an agreement with the department to determine the amount of water diverted from power records and shall annually report the information to the department.
3.	046	Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.

Remarks:

1.	General	The right holder is responsible on an on-going basis to provide a well suitable for monitoring as determined by the Department. The right holder is responsible to insure that pumpage under this water right does not directly cause the water level to significantly decline in any domestic well drilled and in use prior to March 29, 1978, or to cause the water level in any other well having a prior right to exceed a reasonable pumping level, unless the right holder provides reasonable compensation or mitigation to the prior water right holder for the reduced water levels as determined by the Director. Farmers Union Canal Company water shall be utilized for the irrigation of the lots in Lexington Hills and Trail Creek Ranch parcels equal to or greater than one-half acre in size during periods when water is being delivered in the canal. This water right may be used for irrigation purposes only if the entire amount of water from the Farmers Union Canal Co. remains with the lands in Lexington Hills and Trail Creek Ranch. Sale or transfer of surface water from any portion of these properties will be cause for the Department to further limit the use of this right. The right holder shall permanently maintain totalizing flow measurement devices of a type approved by the Department at each well. The water right holder shall provide flow measurements to the Department on a frequency determined by the Department. Each lot which receives water under this right shall be metered. Rights 63-11413, 63-12017, and 63-12448 when combined shall not exceed a total diversion rate of 3.25 cfs. Rights 63-12017 and 63-12448 also diverted through the point(s) of diversion described above. Points of diversion were formerly known as Hormaechea Wells 1 and 2 and Lexington Wells 1 and 2. They are currently known as City of Eagle Wells 1-4. Place of use is located within the city limits of Eagle and the surrounding service area.
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Dates:

Proof Due Date: 09/01/2000

Proof Made Date: 08/29/2000

Approved Date: 09/11/1991

Moratorium Expiration Date:

Enlargement Use Priority Date:

Water Right Report

Page 3 of 3

Enlargement Statute Priority Date:
Application Received Date: 03/14/1991
Protest Deadline Date:
Number of Protests: 0
Field Exam Date:
Date Sent to State Off:
Date Received at State Off:

Other Information:
State or Federal:
Owner Name Connector:
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:
Mitigation Plan: False

Water Right Report

Page 1 of 2



IDAHO DEPARTMENT OF WATER RESOURCES
Water Permit Report

03/02/2005

WATER RIGHT NO. 63-12448

Owner Type	Name and Address
Current Owner	CITY OF EAGLE PO BOX 1520 EAGLE, ID 83616 (208)939-6813

Priority Date: 04/08/1998
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
MUNICIPAL	1/01	12/31	3.25 CFS	1455 AFA
Total Diversion			3.25 CFS	

Location of Point(s) of Diversion:

GROUND WATER	NWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SESW	Sec. 05	Township 04N	Range 01E	ADA County

Place(s) of use: No POUs found for this right

Dates:

Proof Due Date: 12/01/2003

Proof Made Date:

Approved Date: 12/03/1998

<http://www.idwr.idaho.gov/apps/ExtSearch/RightReportAJ.asp?BasinNumber=63&SequenceNumber=12448...> 3/2

Water Right Report

Page 2 o

Moratorium Expiration Date:
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Application Received Date: 04/08/1998
Protest Deadline Date: 07/09/2001
Number of Protests: 4
Field Exam Date::
Date Sent to State Off:
Date Received at State Off:

Other Information:

State or Federal:
Owner Name Connector:
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:
Mitigation Plan: False



Water Right Report

Page 2 of 2



IDAHO DEPARTMENT OF WATER RESOURCES
Water Permit Report

03/02/2005

WATER RIGHT NO. 63-12448

Owner Type	Name and Address
Current Owner	CITY OF EAGLE PO BOX 1520 EAGLE, ID 83616 (208)939-6813

Priority Date: 04/08/1998
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
MUNICIPAL	1/01	12/31	3.25 CFS	1455 AFA
Total Diversion			3.25 CFS	

Location of Point(s) of Diversion:

GROUND WATER	NWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SESW	Sec. 05	Township 04N	Range 01E	ADA County

Place(s) of use: No POUs found for this right

Dates:

Proof Due Date: 12/01/2003

Proof Made Date:

Approved Date: 12/03/1998

<http://www.idwr.idaho.gov/apps/ExtSearch/RightReportAJ.asp?BasinNumber=63&SequenceNumber=12448...> 3/2

Water Right Report

Page 1 of 3



IDAHO DEPARTMENT OF WATER RESOURCES
Water Permit Report

03/02/2005

WATER RIGHT NO. 63-12017

<u>Owner Type</u>	<u>Name and Address</u>
Current Owner	CITY OF EAGLE C/O CHRISTOPHER H MEYER PO BOX 2720 BOISE, ID 83701-2720 (208)388-1200
Original Owner	TREASURE VALLEY VILLAGE LTD PARTNERSHIP 1815 E STONEYBROOK CT EAGLE, ID 83616 (208)939-6000
Original Owner	LEXINGTON HILLS INC 1815 E STONYBROOK CT EAGLE, ID 83616 (208)939-6000

Priority Date: 07/27/1993

Status: Active

<u>Source</u>	<u>Tributary</u>
GROUND WATER	

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
WILDLIFE	1/01	12/31	1.56 CFS	
WILDLIFE STORAGE	1/01	12/31		15 AFA
RECREATION	1/01	12/31	1.56 CFS	
RECREATION STORAGE	1/01	12/31		15 AFA
AESTHETIC	1/01	12/31	1.56 CFS	
AESTHETIC STORAGE	1/01	12/31		15 AFA
DIVERSION TO STORAGE	1/01	12/31	1.56 CFS	
Total Diversion			1.56 CFS	

Water Right Report

Page 2 of 3

Location of Point(s) of Diversion:

GROUND WATER	NWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSWSW	Sec. 03	Township 04N	Range 01E	ADA County
GROUND WATER	SWSW	Sec. 04	Township 04N	Range 01E	ADA County
GROUND WATER	NESE	Sec. 04	Township 04N	Range 01E	ADA County

Place(s) of use:

Place of Use Legal Description: WILDLIFE ADA County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
04N	01E	3		SWNE			NWSW			SWSW			SESW	
				NESW			SESE							
				NWSE										

Place of Use Legal Description: RECREATION same as WILDLIFE

Place of Use Legal Description: AESTHETIC same as WILDLIFE

Conditions of Approval:

1.	004	The issuance of this right does not grant any right-of-way or easement across the land of another.
2.	01C	A flow measurement port or other device as specified by the Department shall be installed by the right holder to provide for the installation of measuring equipment and the determination of the rate of diversion by the Department.
3.	020	Use of water under this right may be affected by an agreement between the protestant and the right holder.
4.	046	Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
5.	26A	Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
6.	46A	A well drilled pursuant to this permit must be located at least 500 feet from any existing well. Well spacing closer than 500 feet must be approved by the Department of Water Resources.
7.	46B	The right holder shall comply with Idaho well construction standards when constructing a well pursuant to this right.

Water Right Report

Pag. 3

Remarks:

1. General	Place of use is located within Lexington Hills and Trail Creek Subdivisions.
------------	--

Dates:

Proof Due Date: 01/01/1999

Proof Made Date: 04/08/1999

Approved Date: 01/24/1994

Moratorium Expiration Date:

Enlargement Use Priority Date:

Enlargement Statute Priority Date:

Application Received Date: 04/21/1993

Protest Deadline Date:

Number of Protests: 0

Field Exam Date::

Date Sent to State Off:

Date Received at State Off:

Other Information:

State or Federal:

Owner Name Connector:

Water District Number: 63

Generic Max Rate per Acre:

Generic Max Volume per Acre:

Swan Falls Trust or Nontrust:

Swan Falls Dismissed:

DLE Act Number:

Cary Act Number:

Mitigation Plan: False



APPENDIX H
2004 Water Quality Report
Laboratory Test Reports
Coliform Sampling Plan
Representative Coliform Test Reports
DEQ Source Water Assessment



2004 WATER QUALITY REPORT

CITY OF EAGLE

PWS#: 4010201

Dear Customer:

This Water Quality Report provides important information about your drinking water. Both the Idaho Department of Environmental Quality (ID DEQ) and the U.S. Environmental Protection Agency (USEPA) require water suppliers to make the following water quality information available to all customers. Both agencies monitor our water quality to insure that we comply with all regulations. Our water quality consistently meets or surpasses state and federal standards.



SOURCE OF SUPPLY

The water you receive at your home is supplied by a single groundwater source. This well (identified as Lexington Hills Well #1) is located in the Lexington Hills Subdivision and is 405 feet deep. In an emergency, back-up water supply is available from United Water Idaho (UWID) through a 16-inch main located in Floating Feather Road.

The water from Lexington Hills Well #1 is treated with small amounts of chlorine to protect against potentially hazardous microorganisms that can get into the water. Your water system is a public water system owned by the City of Eagle, and operated by United Water Operations Idaho, Inc. Please take a moment to review the following important information about your drinking water. If you would like additional information, please feel free to call the United Water customer service department at 362-7304 or the EPA Safe Drinking Water Hotline at (800) 426-4791.

EXPECTED CONTAMINANTS

All drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. As water travels over the land or underground it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. It's important to remember that the

presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at (800) 426-4791.

Many contaminants have minimum detection limits. This means that current laboratory testing procedures cannot reasonably detect below certain levels. When a contaminant has a ND (Non-Detect) in the result column instead of a number, it means that either there is no contaminant present or that it is present at levels too low for modern laboratory methods to detect.

MONITORING

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The tables in this report reflect monitoring test results from 2000 through 2003. For each chemical tested, the data and information is derived from the most recent testing performed in accordance with all regulations. Each of the regulated contaminants compares to a Maximum Contaminant Level (MCL) and a Maximum Contaminant Level Goal (MCLG), established by the EPA and the State of Idaho.

HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing



chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

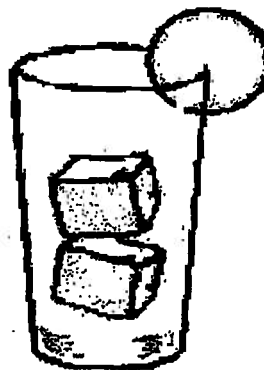
BOTTLED WATER or TAP WATER?

The sources of drinking water (for both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that the water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. So, what's the bottom line? If bottled and tap water meet the federal standards, they are both safe to drink. However, your tap water is substantially less expensive than bottled water.



WATER QUALITY RESULTS

There are three sections of tables in this report:

Section #1:

- Displays the results of regulated detected contaminants. These tables are required. (Primary Standards)

Section #2:

- Displays the results for inorganic compounds that are unregulated, but relate to the aesthetic quality of your water (Secondary Standards).

Section #3:

- Presents three lists of regulated contaminants tested for, but not detected in your water.

LEAD AND COPPER

In March 2003, we monitored for lead and copper at 22 homes throughout the water system. All samples met the requirements of this rule.



MICROBIOLOGICAL

Coliform bacteria are naturally present in the environment (found in the intestines of both animals and humans). Coliform bacteria alone are not pathogenic. However, their presence indicates that other disease causing bacteria may be present. As a result, they are referred to as "indicator organisms". Two specific types of coliform bacteria, which indicate that the water may be contaminated with human or animal wastes, are called fecal coliform and *Escherichia coli* (*E. coli*). These bacteria can cause food-borne and waterborne outbreaks of intestinal distress. No coliform bacteria were detected in your water in 2003.

ARSENIC

While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.



SOURCE WATER ASSESSMENT

Under the Safe Drinking Water Act Amendments of 1996, all states were required by the US EPA to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The assessment is based on a land use inventory of

the designated assessment area and sensitivity factors associated with the watershed and aquifer characteristics. The ID DEQ completed its final source water assessment of the water system in 2003. You may request a summary of the assessment by calling Sandy Hemenway at the ID DEQ (373-0550).

FREQUENTLY ASKED QUESTIONS

What if my water tastes or smells like chlorine?

We treat the water with chlorine. Low doses of chlorine help protect our consumers from potentially hazardous microorganisms. We also add chlorine to meet regulatory mandates for safe drinking water. When you take a drink of water, immediately after filling up a glass, it sometimes has a noticeable chlorine odor. This isn't due to the fact that there is too much chlorine in your water. Instead, it's caused by the aerator in your faucet and the change in pressure from the pipes to the atmosphere. The longer your water is exposed to the air, the greater opportunity the chlorine has to dissipate out of your water.

What is water hardness?

Hardness refers to dissolved minerals in the water (calcium and magnesium) that interfere with the sudsing action of soap. The harder the water, the less the sudsing action. Your water hardness is 9 gpg or 160 mg/L. This level would be considered hard water.

KEY TO TABLES

AL	= Action Level	pCi/L	= picocuries per liter
EPA	= Environmental Protection Agency	ppm	= parts per million = milligrams per liter (mg/L)
gpg	= grains per gallon [gpg = (ppm)/17.1]	ppb	= parts per billion = micrograms per liter (ug/L)
LI	= Langelier Index	SDWA	= Safe Drinking Water Act
MCL	= Maximum Contaminant Level	SMCL	= Secondary Maximum Contaminant Level
MCLG	= Maximum Contaminant Level Goal	SOCs	= Synthetic Organic Chemicals
MRDLG	= Maximum Residual Disinfectant Level Goal	TDS	= Total Dissolved Solids
MRDL	= Maximum Residual Disinfectant Level	UR	= Unregulated
ND	= Non-Detect	VOCs	= Volatile Organic Chemicals

IMPORTANT DEFINITIONS

Action Level:

The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirement which a water system must follow.

Aesthetic:

Those qualities which affect the senses (sight, taste, odor, appearance). These are non-health related characteristics of water.

Inorganic Chemicals:

Chemicals associated with minerals and metals.

Maximum Contaminant Level Goal (MCLG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL):

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Parts per billion (ppb):

One part per billion is equivalent to half of a dissolved aspirin tablet in 1,000 bathtubs of water (approximately 50,000 gallons).

Primary Standards:

Federal drinking water regulations for substances that are health related. Water suppliers must meet all primary drinking water standards.

Radionuclides:

Radioactive contaminants which are emitted from certain naturally occurring minerals as they decay.

Secondary Standards:

Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor, and appearance.

Synthetic Organic Chemicals (SOCs):

Man-made compounds including pesticides and herbicides.

Treatment Technique (TT):

A required process intended to reduce the level of a contaminant in drinking water.

Volatile Organic Chemicals (VOCs):

Those organic compounds that evaporate easily. They are associated mainly with contamination of groundwater. Examples include: industrial by-products, petroleum-based chemicals, and dry cleaning solvents.

2004 Water Quality Report

Section #1

WATER QUALITY RESULTS**Inorganic Chemicals**

Primary Standards - Directly related to the safety of drinking water.

SUBSTANCE	UNITS	EPA STANDARDS		RESULTS	SOURCE OF CONTAMINANT	Violation
		MCLG	MCL			
Arsenic (2001)	ppb	NA	50	6	Erosion of natural deposits	No
Barium (2001)	ppm	2	2	0.07	Erosion of natural deposits	No
Fluoride (2001)	ppm	4	4	0.39	Erosion of natural deposits	No
Mercury (2001)	ppb	2	2	0.5	Erosion of natural deposits	No
Nitrate	ppm	10	10	1.6	Runoff from fertilizer use	No

Organic Chemicals

Total Trihalomethanes (TTHMs)	ppb	NA	80	6.8	Disinfection by-product	No
Total Haloacetic Acids (HAA5)	ppb	NA	60	ND	Disinfection by-product	No

		MROLG	MRDL	Annual Avg		
Chlorine	ppm	4	4	0.5	Disinfection by-product	No

Radionuclides

Alpha emitters (2000)	pCi/l	0	15	10.6	Erosion of natural deposits	No
Beta/photon emitters (2000)	pCi/l	0	50	5.5	Decay of natural and man-made deposits	No
Radium 226	pCi/l	0	5	0.4	Erosion of natural deposits	No

Lead & Copper (March '03)

SUBSTANCE	EPA STANDARDS		90th PERCENTILE	SOURCE OF CONTAMINANT	Violation
	MCLG	AL			
Copper (ppm)	1.3	1.3	0.92	Corrosion of household plumbing	No
Lead (ppb)	0	15	ND		No

Microbiological

	MCLG	MCL	RESULTS		
Total Coliform Bacteria	Zero Bacteria Detected	Not present in more than 5% of samples	Zero (0) bacteria detected	Naturally present in the environment	No

2004 Water Quality Report

Section #2

WATER QUALITY RESULTS**Secondary Inorganic Contaminants**

The following Table provides information on the aesthetic quality of your water. It is not required, nor regulated, but is useful in understanding more about the characteristics of the water serving your home.

SUBSTANCE NAME	UNITS	GUIDELINE	RESULTS
Alkalinity	ppm	UR	243
Aluminum	ppb	50 - 200	ND
Calcium	ppm	UR	40.7
Chloride	ppm	250	4
Corrosivity	LI	UR	-0.6
Hardness	gpg	15	9
Iron (2003)	ppb	300	ND
Magnesium	ppm	UR	10.4
Manganese (2003)	ppb	50	ND
pH	pH units	6.5 - 8.5	7.0
Potassium	ppm	UR	2.97
Silver	ppb	100	ND
Sodium	ppm	UR	49.2
Sulfate	ppm	250	21
TDS	ppm	500	350
Zinc	ppm	5	ND

2004 Water Quality Report

Section #3

WATER QUALITY RESULTS**Non-Detected Contaminants**

The following Table contains a list of regulated contaminants we test for but have not detected. The contaminants in this list are inorganic chemicals, volatile, and synthetic organic chemicals. We are presenting this list to give you an idea of the large number of contaminants we regularly sample for, in addition to the contaminants we have detected. Our ultimate goal is to keep you protected and ensure that your water is safe to drink.

Non-Detected Chemicals (2001)

IOCs		
Antimony	Chromium	Selenium
Beryllium	Nickel	Thallium
Cadmium	Nitrite	

VOCs		
1,1-dichloroethylene	carbon tetrachloride	styrene
1,1,1-trichloroethane	cis-1,2-dichloroethylene	tetrachloroethylene
1,1,2-trichloroethane	dichloromethane	total xylenes
1,2-dichloroethane	ethylbenzene	trans-1,2-dichloroethylene
1,2-dichloropropane	monochlorobenzene	trichloroethene
1,2,4-trichlorobenzene	o-dichlorobenzene	vinyl chloride
benzene	p-dichlorobenzene	toluene
MTBE		

SOCs		
2,4-D	Dinoseb	Pentachlorophenol
2,4,5-TP (Silvex)	Diquat	Phthalates
Adipates	Endothall	Picloram
Alachlor	Endrin	Polychlorinated Biphenyls
Atrazine	Ethylene Dibromide	Simazine
Benzo(A)Pyrene	Glyphosate	Toxaphene
Lindane	Heptachlor Epoxide	Vydate (Oxamyl)
Carbofuran	Heptachlor	Aldicarb
Chlordane	Hexachlorobenzene	Aldicarb Sulfoxide
Dalapon	Hexachlorocyclopentadiene	Aldicarb Sulfone
Dibromochloropropane	Methoxychlor	



Analytical Laboratories, Inc.

1804 N. 33rd Street
Boise, Idaho 83703
Phone (208) 342-5515

<http://www.analyticallaboratories.com>

Attn: CAMILLE BROWN
UNITED WATER IDAHO
8248 W VICTORY RD
P O BOX 190420
BOISE, ID 83719-0420

Collected By:

Submitted By: C BROWN

Source of Sample:

LEXINGTON HILLS WELL #1

Time of Collection: 15:40
Date of Collection: 10/12/2004
Date Received: 10/12/2004
Report Date: 11/4/2004

pH = 6.98
Temp = 17.2°C

PWS: 4010201

Laboratory Analysis Report

Sample Number: 0435240

Test Requested	MCL	Analysis Result	Units	MDL	Method	Date Completed	Analyst
Antimony Furnace	0.006	<0.005	mg/L	0.005	SM 3113 B	10/16/2004	DMB
Iron, Fe	UR	<0.05	mg/L	0.05	EPA 200.7	10/20/2004	JH
Arsenic Furnace	0.05	0.005	mg/L	0.005	SM 3113 B	10/26/2004	DMB
Manganese, Mn	UR	<0.05	mg/L	0.05	EPA 200.7	10/20/2004	JH
Barium, Ba	2	0.08	mg/L	0.05	EPA 200.7	10/19/2004	JH
Beryllium Furnace	0.004	<0.0005	mg/L	0.0005	SM 3113 B	10/28/2004	DMB
Cadmium Furnace	0.005	<0.0005	mg/L	0.0005	SM 3113 B	10/27/2004	DMB
Chromium Furnace	0.1	<0.002	mg/L	0.002	SM 3113 B	10/28/2004	DMB
Mercury, Hg	0.002	<0.0002	mg/L	0.0002	EPA 245.1	10/21/2004	KC
Nickel, Ni	UR	<0.02	mg/L	0.02	EPA 200.7	10/14/2004	JH
Selenium Furnace	0.05	<0.005	mg/L	0.005	SM 3113 B	10/30/2004	DMB
Sodium, Na	UR	54.9	mg/L	0.10	EPA 200.7	10/14/2004	JH
Thallium Furnace	0.002	<0.002	mg/L	0.002	EPA 200.9	10/29/2004	DMB
Aluminum, Al	UR	0.11	mg/L	0.10	EPA 200.7	10/15/2004	JH
Calcium, Ca	UR	50.2	mg/L	0.10	EPA 200.7	10/14/2004	JH
Calcium Hardness	UR	125	mg/L	0.25	EPA 200.7	10/14/2004	JH
Magnesium, Mg	UR	12.6	mg/L	0.10	EPA 200.7	10/14/2004	JH
Potassium, K	UR	2.2	mg/L	0.5	EPA 200.7	10/14/2004	JH

MCL = Maximum Contamination Level
MDL = Method/Minimum Detection Limit
UR = Unregulated

Laboratory Analysis Report

Sample Number: 0435240

Test Requested	MCL	Analysis Result	Units	MDL	Method	Date Completed	Analyst
Silver, Ag	UR	<0.005	mg/L	0.005	EPA 272.1	10/15/2004	JH
Zinc, Zn	UR	0.075	mg/L	0.005	EPA 200.7	10/14/2004	JH
Corrosivity	UR	-1.67			Langelier	10/27/2004	WW
Calculated at room temperature, 25.0 deg C. Moderately aggressive.							
Nitrate (as N)	10	1.9	mg/L	0.2	EPA 300.0	10/12/2004	WW
Ammonia Direct (as N)	UR	<0.04	mg/L	0.04	EPA 350.1	10/14/2004	WW
✓ Benzene	5	<0.5	ug/L	0.03	EPA 524.2	10/26/2004	CBO
Carbon tetrachloride	5	<0.5	ug/L	0.01	EPA 524.2	10/26/2004	CBO
✓ 1,2-Dichlorobenzene	100	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
1,2-Dichlorobenzene	600	<0.5	ug/L	0.03	EPA 524.2	10/26/2004	CBO
1,4-Dichlorobenzene	75	<0.5	ug/L	0.03	EPA 524.2	10/26/2004	CBO
1,2-Dichloroethane	5	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
1,1-Dichloroethene	7	<0.5	ug/L	0.07	EPA 524.2	10/26/2004	CBO
cis-1,2-Dichloroethene	70	<0.5	ug/L	0.01	EPA 524.2	10/26/2004	CBO
trans-1,2-Dichloroethene	100	<0.5	ug/L	0.07	EPA 524.2	10/26/2004	CBO
1,2-Dichloropropane	5	<0.5	ug/L	0.01	EPA 524.2	10/26/2004	CBO
Ethylbenzene	700	<0.5	ug/L	0.05	EPA 524.2	10/26/2004	CBO
Styrene	100	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
Tetrachloroethene	5	<0.5	ug/L	0.03	EPA 524.2	10/26/2004	CBO
Toluene	1000	<0.5	ug/L	0.05	EPA 524.2	10/26/2004	CBO
1,2,4-Trichlorobenzene	70	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
1,1,1-Trichloroethane	200	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
1,1,2-Trichloroethane	200	<0.5	ug/L	0.04	EPA 524.2	10/26/2004	CBO
Trichloroethene	5	<0.5	ug/L	0.01	EPA 524.2	10/26/2004	CBO
Vinyl chloride	2	<0.5	ug/L	0.03	EPA 524.2	10/26/2004	CBO
Bromodichloromethane	---	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
Bromoform	---	<0.5	ug/L	0.4	EPA 524.2	10/26/2004	CBO
Chloroform	---	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
Dibromochloromethane	---	<0.5	ug/L	0.03	EPA 524.2	10/26/2004	CBO
Xylene, Total	10000	<0.5	ug/L	0.05	EPA 524.2	10/26/2004	CBO
Dichloromethane	5	<0.5	ug/L	0.02	EPA 524.2	10/26/2004	CBO
Methyl-tert-butylether (MTBE)	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
1,1-Dichloroethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
1,1-Dichloropropene	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
1,2,3-Trichloropropane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO

MCL = Maximum Contamination Level
 MDL = Method/Minimum Detection Limit
 UR = Unregulated

Laboratory Analysis Report

Sample Number: 0435240

Test Requested	MCL	Analysis Result	Units	MDL	Method	Date Completed	Analyst
1,1,1,2-Tetrachloroethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
1,1,2,2-Tetrachloroethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
1,3-Dichloropropene (cis&trans)	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
1,3-Dichloropropane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
2,2-Dichloropropane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
Bromobenzene	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
Bromomethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
Chloroethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
Chloromethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
Dibromomethane	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
2-Chlorotoluene	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
4-Chlorotoluene	UR	<0.5	ug/L	0.2	EPA 524.2	10/26/2004	CBO
Fluoride, F	4.0	0.34	mg/L	0.10	EPA 300.0	10/15/2004	WW
Alkalinity	UR	244	mg/L Ca		EPA 310.1	10/24/2004	ARR
Chloride, Cl	UR	4	mg/L	1	EPA 300.0	10/14/2004	WW
Conductivity	UR	547	umhos	2	EPA 120.1	10/13/2004	CC
Hardness	UR	177	mg/L	5.0	SM 2340	10/17/2004	ARR
Sulfate, SO4	UR	28	mg/L	1	EPA 300.0	10/14/2004	WW
Total Dissolved Solids	UR	262	mg/L	25	EPA 160.1	10/15/2004	DLR

MCL = Maximum Contamination Level
MDL = Method/Minimum Detection Limit
UR = Unregulated





Analytical Laboratories, Inc.

1804 N. 33rd Street
Boise, Idaho 83703
Phone (208) 342-5515

RECEIVED

JAN - 3 2005

UNITED WATER

<http://www.analyticallaboratories.com>

Laboratory Analysis Report

Sample Number: 0435251

Attn: CAMILLE BROWN
UNITED WATER IDAHO
8248 W VICTORY RD
P O BOX 190420
BOISE, ID 83719-0420

Collected By:
Submitted By: C BROWN

Source of Sample:
LEXINGTON HILLS WELL #1

Time of Collection: 15:40
Date of Collection: 10/12/2004
Date Received: 10/12/2004
Report Date: 11/9/2004

PWS: 4010201

FIELD DATA: PH=6.98 TEMP=17.2 DEGREES C; ELI-TESTING PERFORMED AT ENERGY LABORATORIES, INC. RESULTS RECEIVED 11/05/04. RESULTS WERE REVISED ON 12/27/04 DUE TO A CALCULATION ERROR.

Test Requested	MCL	Analysis Result	Units	MDL	Method	Date Completed	Analyst
Uranium-Total	30	11.0	pCi/L	.2	EPA 908.1	11/1/2004	ELI

Thank you for choosing Analytical Laboratories for your testing needs.

If you have any questions about this report, or any future analytical needs, please contact: Cleve Ouellette

MCL = Maximum Contamination Level
MDL = Method/Minimum Detection Limit
UR = Unregulated



Analytical Laboratories, Inc.

1804 N. 33rd Street
Boise, Idaho 83703
Phone (208) 342-5515

Attn: CAMILLE BROWN
UNITED WATER IDAHO
8248 W VICTORY RD
P O BOX 190420
BOISE, ID 83719-0420

Lexington Hills
DBP Results

Collected By:
Submitted By: C BROWN

Source of Sample:

3180 FLOATING FEATHER

Time of Collection: 15:50
Date of Collection: 10/12/2004
Date Received: 10/12/2004
Report Date: 11/4/2004

PWS: 4010201

Laboratory Analysis Report

Sample Number: 0435252

Test Requested	MCL	Analysis Result	Units	MDL	Method	Date Completed	Analyst
Bromodichloromethane		0.9	ug/l	0.5	EPA 524.2	10/26/2004	CBO
Bromoform		1.8	ug/l	0.5	EPA 524.2	10/26/2004	CBO
Chloroform		<0.5	ug/l	0.5	EPA 524.2	10/26/2004	CBO
Dibromochloromethane		1.1	ug/l	0.5	EPA 524.2	10/26/2004	CBO
Total THM's	80	3.8	ug/l	2	EPA 524.2	10/26/2004	CBO
Monochloroacetic acid		<2.0	ug/L	2	SM6251 B	11/3/2004	KWH
Dichloroacetic acid		<1.6	ug/L	1.6	SM6251 B	11/3/2004	KWH
Trichloroacetic acid		<1.7	ug/L	1.7	SM6251 B	11/3/2004	KWH
Monobromoacetic acid		<2.0	ug/L	2	SM6251 B	11/3/2004	KWH
Dibromoacetic acid		3.4	ug/L	1.7	SM6251 B	11/3/2004	KWH
Haloacetic acid 5 total	60	<10	ug/L	10	SM6251 B	11/3/2004	KWH

MCL = Maximum Contamination Level
MDL = Method/Minimum Detection Limit
UR = Unregulated

Thank you for choosing Analytical Laboratories for your testing needs.

If you have any questions concerning this report,

please contact: Cleve Ouellette

LEXINGTON HILLS - CITY OF EAGLE **2004 DBP MONITORING RESULTS**

PWS#: 4010201

3180 Floating Feather Rd	
10/12/2004	

	RESULT (ppb)
chloroform	0.0
bromodichloromethane	0.9
dibromochloromethane	1.1
bromoform	1.8
TOTAL DBP	3.8

	RESULT (ppb)
bromoacetic acid	0.0
chloroacetic acid	0.0
dibromoacetic acid	3.4
dichloroacetic acid	0.0
trichloroacetic acid	0.0
TOTAL THM	3.4

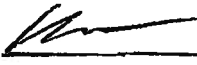
LEXINGTON HILLS - CITY OF EAGLE **2004 DBP CL2 RESIDUALS**

Lexington Hills Well #1	1/7/2004	0.3
Parkforest & Stonybrook FH	1/20/2004	0.5
Parkforest & Stonybrook FH	2/9/2004	0.7
3180 Floating Feather Rd	2/17/2004	0.7
Lexington Hills Well Fire Hydrant	3/1/2004	0.6
1913 Stonybrook	3/17/2004	0.5
1st Quarter Average		0.6
Lexington Hills Well #1	4/7/2004	0.0
2001 Stonybrook	4/19/2004	0.7
Lexington Hills Well #1	5/3/2004	0.0
1930 Stonybrook	5/18/2004	0.8
Lexington Hills Well #1	6/1/2004	0.0
Parkforest & Sunny Ridge	6/16/2004	0.8
2nd Quarter Average		0.4
Lexington Hills Well #1	7/7/2004	0.0
1930 E Stonybrook Ct	7/19/2004	0.3
Lexington Hills Well Fire Hydrant	8/2/2004	0.7
Lexington Hills Well Fire Hydrant	8/17/2004	0.3
Lexington Hills Well #1	9/7/2004	0.0
1930 E Stonybrook Ct	9/22/2004	0.5
3rd Quarter Average		0.3
Lexington Hills Well #1	10/4/2004	0.9
Lexington Hills #1 SS	10/19/2004	0.6
Lexington Hills Well #1	11/1/2004	0.7
Lexington Hills Well #1	11/15/2004	0.4
Lexington Hills Well #1	12/6/2004	0.7
Lexington Hills #1 SS	12/21/2004	0.1
4th Quarter Average		0.6
2004 RUNNING ANNUAL AVG		0.5

SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat - Other Repeat - Untreated V - Invalidated by Lab C - Construction / Special	ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com X Public Water Supply Private Water Supply Other _____																						
RECEIVED OCT - 8 2004 UNITED WATER																							
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REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DATE RECEIVED</td> <td>10/04/2004</td> </tr> <tr> <td>TIME RECEIVED</td> <td>12:30</td> </tr> <tr> <td>DATE ANALYZED</td> <td>10/04/2004</td> </tr> <tr> <td>TIME ANALYZED</td> <td>13:00</td> </tr> </table>	DATE RECEIVED	10/04/2004	TIME RECEIVED	12:30	DATE ANALYZED	10/04/2004	TIME ANALYZED	13:00													
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SEND ADDITIONAL COPIES TO: DEQ - BOISE		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">IF RETEST, ORIGINAL SAMPLE DATE</td> <td style="width: 30%;"></td> </tr> </table>	IF RETEST, ORIGINAL SAMPLE DATE																				
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Phone (208) 362-7371</td> <td>Ext</td> <td>Fax (208) 362-1479</td> <td>email</td> <td>CHILLED 10 C</td> <td>☒ YES ☐ NO</td> </tr> </table>			Phone (208) 362-7371	Ext	Fax (208) 362-1479	email	CHILLED 10 C	☒ YES ☐ NO															
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	09:15	LEXINGTON HILLS <i>Well #1</i>																					

REMARKS: ANALYTICAL METHODS <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Total Coliforms SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 19221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods....16th SM 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods...., 16th ed., 1 </td> <td style="width: 50%; vertical-align: top;"> Fecal Coliforms Membrane Filter Technique, Parts 808C., Standard Methods....16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 E. coli MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(5)(III) </td> </tr> </table>	Total Coliforms SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 19221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods....16th SM 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods...., 16th ed., 1	Fecal Coliforms Membrane Filter Technique, Parts 808C., Standard Methods....16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 E. coli MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(5)(III)	ANALYST: Chris Pichardo Analytical Laboratories, Inc. Laboratory Supervisor
Total Coliforms SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 19221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods....16th SM 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods...., 16th ed., 1	Fecal Coliforms Membrane Filter Technique, Parts 808C., Standard Methods....16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 E. coli MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(5)(III)		

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NAME OF WATER SYSTEM UWID-LEXINGTON HILLS							
COUNTY ADA							
PWS 4010201							
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420							
SEND ADDITIONAL COPIES TO: DEQ - BOISE							
Phone (208) 362-7371 Ext Fax (208) 362-1479 email CHILLED 10 C ☒ YES ☐ NO							
COLLECTED BY: JOE B TRANSPORTED BY: JOE B							
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221	E. COLI SM 9223	HPC SM 9215
S	10/19/2004 7:20	LAB# 0436068 LEXINGTON HILLS SS	0.6	ABSENCE		ABSENCE	

REMARKS: ANALYTICAL METHODS <u>total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed.,1985 JH 9221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods....16th SM 9223 MMO-MUG Test Per 40 CFR141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods...., 16th ed., 1 <u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C., Standard Methods....16th ed.,1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed.,1985 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(6)(III)	ANALYST: RLV Analytical Laboratories, Inc.  Laboratory Supervisor
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SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat - Other Repeat - Untreated V - Invalidated by Lab C - Construction / Special	ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com																
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Phone (208) 362-7371 Ext Fax (208) 362-1479 email CHILLED 10 C ☒ YES ☐ NO																	
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S	11/1/2004	LAB# 0437800	0.7	ABSENCE		ABSENCE											
	9:25	LEXINGTON HILLS WELL															

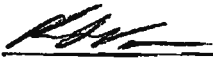
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NAME OF WATER SYSTEM LEXINGTON HILLS COUNTY ADA PWS 4010201							
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420							
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IF RETEST, ORIGINAL SAMPLE DATE							
Phone (208) 362-7371 Ext Fax (208) 362-1479 email CHILLED 10 C ☒ YES ☐ NO							
COLLECTED BY: D HUTTO TRANSPORTED BY: D HUTTO							
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221	E. COLI SM 9223	HPC SM 9215
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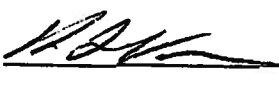
REMARKS:	ANALYST: RLV
ANALYTICAL METHODS	
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Analytical Laboratories, Inc.  Laboratory Supervisor	

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NAME OF WATER SYSTEM UWID-LEXINGTON HILLS		COUNTY ADA	PWS 4010201
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420		DATE RECEIVED 12/6/2004 TIME RECEIVED 16:00 DATE ANALYZED 12/6/2004 TIME ANALYZED 17:00	
SEND ADDITIONAL COPIES TO: DEQ - BOISE		IF RETEST, ORIGINAL SAMPLE DATE	
Phone (208) 362-7371	Ext	Fax (208) 362-1479	email
COLLECTED BY: D HUTTO		TRANSPORTED BY: D HUTTO	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	CI res
			TOTAL COLIFORMS
			FECAL COLIFORMS
			E. COLI
			HPC
			SM 9223
			SM 9221
			SM 9223
			SM 9215

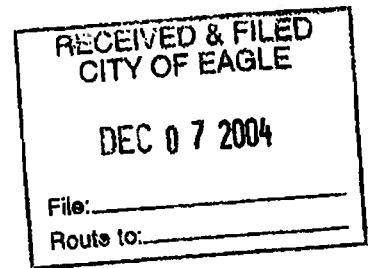
S	12/6/2004	LAB# 0441110	0.7	ABSENCE	ABSENCE	
	9:00	LEXINGTON HILLS <i>Well #1</i>				

REMARKS: ANALYTICAL METHODS <u>Total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed.,1985 SM 9221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods....16th ed.,1985 SM 9223 MMO-MUG Test Per 40 CFR141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods...., 16th ed., 1	ANALYST: RLV Analytical Laboratories, Inc.  Laboratory Supervisor
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UWID LEXINGTON HILLS		ADA		4010201				
CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420				DATE RECEIVED				12/21/2004
				TIME RECEIVED				16:08
				DATE ANALYZED				12/21/2004
				TIME ANALYZED				17:00
SEND ADDITIONAL COPIES TO: DEQ - BOISE						IF RETEST, ORIGINAL SAMPLE DATE		
Phone (208) 362-7371		Ext		Fax (208) 362-1479		email		
COLLECTED BY: D. HUTTO		TRANSPORTED BY: D. HUTTO		CHILLED 10 C		☒ YES ☐ NO		
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	CI res	TOTAL COLIFORMS	FECAL COLIFORMS	E. COLI	HPC	
				SM 9223	SM 9221	SM 9223	SM 9215	
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REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS <u>Total Coliforms</u> 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 9221 Multiple Tube Fermentation, Parts 909 and 909A, and 908B, Standard Methods....16th ed., 1985 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods...., 16th ed., 1		<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods....16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(6)(II)	
		Analytical Laboratories, Inc.  Laboratory Supervisor	

**2005 COLIFORM SAMPLE PLAN
CITY OF EAGLE
PWS# 4010201**



I. SYSTEM MAP

See attached map for identification of all sampling locations (source of supply and sampling stations).

II. NARRATIVE

SYSTEM INFORMATION

United Water Operations Idaho
PWS# 4010201
P.O. Box 190420
Boise, ID 83719
Ada County

SOURCES

This water system is comprised of three subdivisions: Brookwood, Echo Creek, and Lexington Hills. The City of Eagle uses Lexington Hills Well #1 to supply Lexington Hills and Echo Creek subdivisions. Brookwood subdivision and fire protection for the entire system are currently supplied by United Water Idaho (UWID PWS# 4010016).

UWID will discontinue water supply to Brookwood subdivision when the new UWID 16" main on Floating Feather Rd is completed (2005). At that time, the existing 12" main on Floating Feather road will be used to supply Brookwood with water from the Lexington Hills Well #1. The City of Eagle plans to drill another well for this water system in upcoming years. UWID will continue to provide emergency back-up supply for the foreseeable future.

STORAGE AND BOOSTER STATIONS

This system has no reservoirs or booster stations at this time.

PRESSURE ZONES

There are two pressure zones at this time:

1. Lexington Hills
2. Brookwood

TOTAL POPULATION SERVED (as of 10/31/04)

Approximately 3,750

TOTAL # OF SERVICE CONNECTIONS (as of 10/31/04)

Total = 1,250

Of this total - 1,240 Residential

10 Commercial

SAMPLING INFORMATION

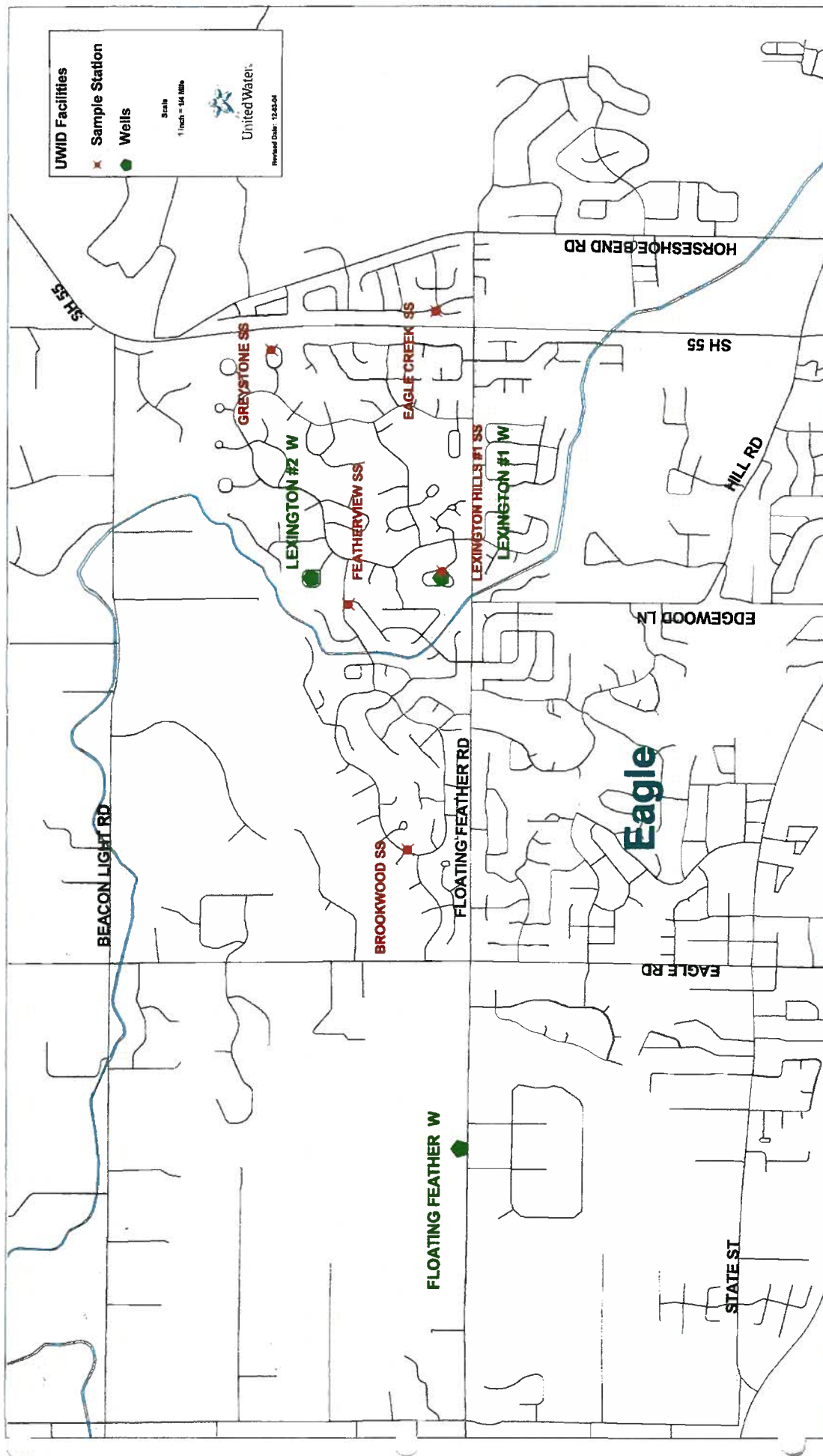
1. Minimum # of samples required per month is two.
2. Total # of routine sampling sites needed to represent all distribution areas is five.
3. Location of all routine sampling sites (see map for detailed locations):
 - **Lexington Hills #1 Sample Station (SS)** - Lexington Hills Well #1 water
 - **Brookwood SS** (currently provided by water from PWS#4010016, UWID system)
 - **Featherview SS** - Lexington Hills Well #1 water
 - **Greystone SS** - Lexington Hills Well #1 water
 - **Eagle Creek SS** - Lexington Hills Well #1 water
4. Samples will be taken every two weeks, typically the 1st and 3rd weeks of every month, at rotating sample station locations (see attached "2005 Coliform Sampling Schedule").
5. Repeat sampling site availability: Repeat sample sites will be identified as necessary.

PLAN PREPARATION INFORMATION

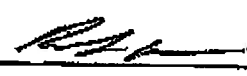
1. Plan Preparer: Camille Brown
2. Title: Water Quality Specialist
3. Phone #: 362-7371

2005 Coliform Sampling Schedule
City of Eagle (PWS# 4010201)

	WEEK #1	WEEK #3
January	Lexington Hills #1 SS	Brookwood SS
February	Featherview SS	Greystone SS
March	Eagle Creek SS	Lexington Hills #1 SS
April	Brookwood SS	Featherview SS
May	Greystone SS	Eagle Creek SS
June	Lexington Hills #1 SS	Brookwood SS
July	Featherview SS	Greystone SS
August	Eagle Creek SS	Lexington Hills #1 SS
September	Brookwood SS	Featherview SS
October	Greystone SS	Eagle Creek SS
November	Lexington Hills #1 SS	Brookwood SS
December	Featherview SS	Greystone SS



SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.					
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) Upstream repeat Downstream repeat X - Other Repeat W - Untreated V - Invalidated by Lab C - Construction / Special		ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com					
		X Public Water Supply		Private Water Supply		Other _____	
NAME OF WATER SYSTEM				COUNTY		PWS	
UWID - LEXINGTON HILLS				ADA		4010201	
REPORT RESULTS TO:				DATE RECEIVED		4/7/2004	
CAMILLE BROWN				TIME RECEIVED		13:12	
UNITED WATER IDAHO				DATE ANALYZED		4/7/2004	
P O BOX 190420				TIME ANALYZED		14:30	
BOISE, ID 83719-0420				IF RETEST, ORIGINAL SAMPLE DATE			
SEND ADDITIONAL COPIES TO: DEQ - BOISE							
Phone (208) 362-7371		Ext		Fax (208) 362-1479		email	
COLLECTED BY: S FRISBEE		TRANSPORTED BY: S FRISBEE		CHILLED TO C		☒ YES ☐ NO	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS	FECAL COLIFORMS	E COLI	HPC
				SM 9223	SM 9221	SM 9223	SM 9215
S	4/7/2004	LAB# 0410312	0.0	ABSENCE		ABSENCE	
	9:20	LEXINGTON HILLS WELL					

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS		Analytical Laboratories, Inc.	
<u>Total Coliforms</u> 2 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 SM 9221 Multiple Tube Fermentation, Parts 909 and 909A, and 909B, Standard Methods....16th ed., 1985 SM 9223 MND-MUG Test Per 40 CFR 141.21(f)(3)(IV)		<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 909C, and 909C, Standard Methods....16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods....16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(6)(ii)	
HPC Pour Plate, Part 907, Standard Methods.... 16th ed., 1		 Laboratory Supervisor	

SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.					
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat O - Other Repeat V - Untreated V - Invalidated by Lab C - Construction / Special		ID00820 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515					
		X Public Water Supply		Private Water Supply		Other	
NAME OF WATER SYSTEM			COUNTY		PWS		
UNITED WATER IDAHO-LEXINGTON HILLS			ADA		4010201		
CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420			DATE RECEIVED			4/19/2004	
			TIME RECEIVED			14:45	
			DATE ANALYZED			4/19/2004	
			TIME ANALYZED			17:00	
SEND ADDITIONAL COPIES TO: DEQ - BOISE			IF RETEST, ORIGINAL SAMPLE DATE				
Phone (208) 362-7371		Ext	Fax (208) 362-1479	email		CHILLED 10 C	☒ YES ☐ NO
COLLECTED BY: JOE B				TRANSPORTED BY: JOE B			
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221	E. COLI SM 9223	HPC SM 9215
S	4/19/2004 10:00	LAB# 0411901 2001 STONYBROOK DIST SAMPLE	0.7	ABSENCE		ABSENCE	

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS		Analytical Laboratories, Inc.	
<u>Total Coliforms</u>			
SM 9222	Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985	Membrane Filter Technique, Parts 909C, Standard Methods... 16th ed., 1985	
SM 9221	Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods... 16th	Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985	
SM 9223	MPO-MUG Test Per 40 CFR 141.21(f)(3)(iv)	E. coli	
HPC	Four Plate, Part 907, Standard Methods... 16th ed., 1	MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(5)(ii)	
		 Laboratory Supervisor	

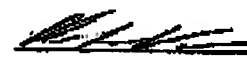
SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.					
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat Downstream repeat Other Repeat V - Untreated W - Invalidated by Lab C - Construction / Special		ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com					
		X Public Water Supply		Private Water Supply		Other _____	
NAME OF WATER SYSTEM				COUNTY		PWS	
UNITED WATER IDAHO-LEXINGTON HILLS				ADA		4010201	
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420				DATE RECEIVED		5/3/2004	
				TIME RECEIVED		12:50	
				DATE ANALYZED		5/3/2004	
				TIME ANALYZED		14:00	
SEND ADDITIONAL COPIES TO: DEQ - BOISE				IF RETEST, ORIGINAL SAMPLE DATE			
Phone (208) 362-7371		Ext		Fax (208) 362-1479		email	
						CHILLED 10 C ☒ YES ☐ NO	
COLLECTED BY: E HANSEN				TRANSPORTED BY: E HANSEN			
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS	FECAL COLIFORMS	E. COLI	HPC
				SM 9223	SM 9221	SM 9223	SM 9215
S	5/3/2004 7:40	LAB# 0413679 LEXINGTON HILLS WELL	0.0	ABSENCE		ABSENCE	

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS <u>Total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985 SM 9221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods... 16th ed., 1985 SM 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(iv)		<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods... 16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(d)(7) and 40 CFR 141.21(f)(5)(iii)	
HPC Pour Plate, Part 907, Standard Methods... 16th ed., 1		Analytical Laboratories, Inc.  Laboratory Supervisor	

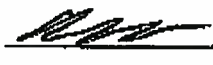
SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat O - Other Repeat V - Untreated W - Invalidated by Lab C - Construction / Special		ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com					
NAME OF WATER SYSTEM UWID - LEXINGTON HILLS		COUNTY ADA		PWS 4010201		X Public Water Supply Private Water Supply Other	
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420				DATE RECEIVED 5/18/2004 TIME RECEIVED 15:38 DATE ANALYZED 5/18/2004 TIME ANALYZED 17:00			
SEND ADDITIONAL COPIES TO: DEQ - BOISE				IF RETEST, ORIGINAL SAMPLE DATE			
Phone (208) 362-7371		Ext		Fax (208) 362-1479		email	
COLLECTED BY: S FRISBEE		TRANSPORTED BY: S FRISBEE		CHILLED 10 C		☒ YES ☐ NO	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221	E. COLI SM 9223	HPC SM 9215
S	5/18/2004 10:30	LAB# 0415873 1930 STONYBROOK CT	0.8	ABSENCE		ABSENCE	

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS <u>Total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985 SM 9221 Multiple Tube Fermentation, Parts 909 and 909A, and 909B, Standard Methods... 16th ed., 1985 SM 9223 MUG-MUG Test Per 40 CFR 141.211(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods... 16th ed., 1		<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods... 16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(f)(7) and 40 CFR 141.211(f)(5)(II)	
		Analytical Laboratories, Inc.  Laboratory Supervisor	

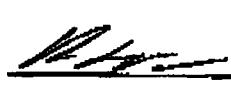
SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.					
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat O - Other Repeat - Untreated V - Invalidated by Lab C - Construction / Special		ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-674-6773 1-208-342-5515 www.analyticallaboratories.com					
		X Public Water Supply		Private Water Supply		Other	
NAME OF WATER SYSTEM UNITED WATER IDAHO - LEXINGTON HILLS				COUNTY ADA		PWS 4010201	
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420				DATE RECEIVED 6/1/2004 TIME RECEIVED 15:20 DATE ANALYZED 6/1/2004 TIME ANALYZED 17:00			
SEND ADDITIONAL COPIES TO: DEQ BOISE				IF RETEST, ORIGINAL SAMPLE DATE			
Phone (208) 362-7371		Ext		Fax (208) 362-1479		email	
COLLECTED BY: BUTCH		TRANSPORTED BY: BUTCH		CHILLED 10 C		☒ YES ☐ NO	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	CI res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221	E. COLI SM 9223	HPC SM 9215
8	6/1/2004 14:15	LAB# 0417485 LEXINGTON HILLS #1-4" PUMP	0.0	ABSENCE		ABSENCE	

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS		Analytical Laboratories, Inc.	
<u>Total Coliforms</u> ☒ Membrane Filter Technique, Parts 909 and 909A, Standard Methods, 19th ed., 1985 <u>SM 9221</u> Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods, 19th ed., 1985 <u>SM 9222</u> BAMO-MUG Test Per 40 CFR 141.21(f)(3)(iv)		<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods, 19th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods, 19th ed., 1985 <u>E. coli</u> MUG Test Per 141.21400(7) and 40 CFR 141.21(f)(6)(iii)	
<u>HPC</u> Pour Plate, Part 907, Standard Methods, 19th ed., 1		 Laboratory Supervisor	

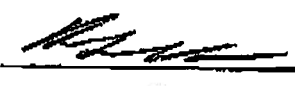
SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.					
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat O - Other Repeat V - Untreated V - Invalidated by Lab C - Construction / Special		ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-674-5773 1-208-342-5515 www.analyticallaboratories.com					
		X Public Water Supply		Private Water Supply		Other _____	
NAME OF WATER SYSTEM UNITED WATER IDAHO-LEXINGTON HILLS				COUNTY ADA		PWS 4010201	
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420				DATE RECEIVED 6/16/2004			
				TIME RECEIVED 13:15			
				DATE ANALYZED 6/16/2004			
				TIME ANALYZED 17:30			
SEND ADDITIONAL COPIES TO: DEQ - BOISE				IF RETEST, ORIGINAL SAMPLE DATE			
Phone (208) 362-7371		Ext	Fax (208) 362-1479	email		CHILLED 10 C ☒ YES ☐ NO	
COLLECTED BY: D MCCLUNG				TRANSPORTED BY: D MCCLUNG			
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221	E. COLI SM 9223	HPC SM 9215
S	6/16/2004 10:00	LAB# 0419379 FIRE HYDRANT @ PARK FOREST/SUNNYRIDGE	0.8	ABSENCE		ABSENCE	

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS		Analytical Laboratories, Inc.	
<u>Total Coliforms</u>			
SM 9222	Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 18th ed., 1985	Membrane Filter Technique, Parts 909C, Standard Methods... 18th ed., 1985	
SM 9221	Multiple Tube Fermentation, Parts 906 and 906A, and 906B, Standard Methods... 18th	Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 18th ed., 1985	
SM 9223	MMO-MUG Test Per 40 CFR 141.21(f)(3)(iv)	<u>E. coli</u>	
HPC	Pour Plate, Part 907, Standard Methods... 18th ed., 1	MUG Test Per 141.214(b)(7) and 40 CFR 141.21(f)(6)(ii)	
		 Laboratory Supervisor	

SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.					
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) - Upstream repeat - Downstream repeat - Other Repeat - Untreated V - Invalidated by Lab C - Construction / Special		ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515					
		X Public Water Supply		Private Water Supply		Other _____	
NAME OF WATER SYSTEM UNITED WATER IDAHO-LEXINGTON HILLS				COUNTY ADA		PWS 4010201	
CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420				DATE RECEIVED		7/7/2004	
				TIME RECEIVED		11:40	
				DATE ANALYZED		7/7/2004	
				TIME ANALYZED		15:00	
SEND ADDITIONAL COPIES TO: DEQ - BOISE				IF RETEST, ORIGINAL SAMPLE DATE			
Phone (208) 362-7371		Ext		Fax (208) 362-1479		email	
COLLECTED BY: E HANSEN		TRANSPORTED BY: E HANSEN		CHILLED 10 C		☒ YES ☐ NO	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS	FECAL COLIFORMS	E. COLI	HPC
				SM 9223	SM 9221	SM 9223	SM 9215
S	7/7/2004 7:40	LAB# 0421855 LEXINGTON HILLS WELL	0.0	ABSENCE		ABSENCE	

REMARKS:		ANALYST: RLV	
ANALYTICAL METHODS <u>Total Coliforms</u> 22 Membrane Filter Technique, Parts 909 and 909A, Standard Methods.... 16th ed., 1995 9221 Multiple Tube Fermentation, Parts 906 and 906A, and 9088, Standard Methods.... 16th ed., 1995 9223 MMC-MUG Test Per 40 CFR 141.21(f)(3)(iv)		<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods.... 16th ed., 1995 Membrane Filter Technique, Parts 909 and 909A, Standard Methods.... 16th ed., 1995 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(5)(iii)	
HPC Pour Plate, Part 907, Standard Methods.... 16th ed., 1		Analytical Laboratories, Inc.  Laboratory Supervisor	

SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat Other Repeat - Untreated V - Invalidated by Lab C - Construction / Special	ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com		
NAME OF WATER SYSTEM UWID LEXINGTON HILLS		COUNTY ADA	PWS 4010201
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420		DATE RECEIVED 7/19/2004 TIME RECEIVED 12:30 DATE ANALYZED 7/19/2004 TIME ANALYZED 16:00	
SEND ADDITIONAL COPIES TO: DEQ - BOISE		IF RETEST, ORIGINAL SAMPLE DATE	
Phone (208) 362-7371	Ext	Fax (208) 362-1479	email
COLLECTED BY: S FRISBEE		TRANSPORTED BY: S FRISBEE	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	CI res
			TOTAL COLIFORMS SM 9223
			FECAL COLIFORMS SM 9221
			E. COLI SM 9223
			HPC SM 9215
S	7/19/2004	LAB# 0423513 1930 STONYBROOK CT	0.3
		ABSENCE	ABSENCE

REMARKS: ANALYTICAL METHODS <u>Total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 908 and 909A, Standard Methods...16th ed., 1985 9221 Multiple Tube Fermentation, Parts 908 and 908A and 908B, Standard Methods...16th ed., 1985 SM 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(iv) HPC Pour Plate, Part 907, Standard Methods..., 16th ed., 1	ANALYST: RLV Analytical Laboratories, Inc.  Laboratory Supervisor
<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods...16th ed., 1985 Membrane Filter Technique, Parts 908 and 909A, Standard Methods...16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(6)(iii)	

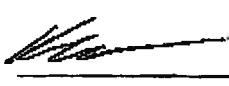
SAMPLE TYPE CODE		ANALYTICAL LABORATORIES, INC.			
S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) - Upstream repeat - Downstream repeat - Other Repeat I - Untreated V - Invalidated by Lab C - Construction / Special	ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com X Public Water Supply Private Water Supply Other _____				
NAME OF WATER SYSTEM UWID-LEXINGTON HILLS		COUNTY ADA		PWS 4010201	
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420		DATE RECEIVED 8/2/2004 TIME RECEIVED 16:50 DATE ANALYZED 8/2/2004 TIME ANALYZED 17:00			
SEND ADDITIONAL COPIES TO: DEQ - BOISE		IF RETEST, ORIGINAL SAMPLE DATE			
Phone (208) 362-7371		Ext		Fax (208) 362-1479	
email		CHILLED 10 C		X YES! NO	
COLLECTED BY: D MCCLUNG		TRANSPORTED BY: D MCCLUNG			
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221
				E. COLI SM 9223	HPC SM 9215
S	8/2/2004 7:20	LAB# 0425400 FIRE HYDRANT <i>outside Well House</i>	0.7	ABSENCE	ABSENCE

REMARKS:		ANALYST: Lynn Murray	
ANALYTICAL METHODS		Analytical Laboratories, Inc.	
<u>Coliforms</u> <u>22</u> Membrane Filter Technique, Parts 908 and 909A, Standard Methods... 16th ed., 1985 <u>SM 9221</u> Multiple Tube Fermentation, Parts 908 and 909A, and 908B, Standard Methods... 16th ed., 1985 <u>SM 9223</u> MMO-MUG Test Per 40 CFR 141.21(f)(3)(iv)	<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods... 16th ed., 1985 Membrane Filter Technique, Parts 908 and 909A, Standard Methods... 16th ed., 1985 <u>E. coli</u> MUG Test Per 141.21400(7) and 40 CFR 141.21(f)(5)(iii)	 Laboratory Supervisor	
<u>HPC</u> Pour Plate, Part 907, Standard Methods... 16th ed., 1			

SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat D - Downstream repeat / - Other Repeat / - Untreated V - Invalidated by Lab C - Construction / Special	ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-674-5773 1-208-342-5515 www.analyticallaboratories.com																
RECEIVED AUG 30 2004 UNITED WATER																	
X Public Water Supply Private Water Supply Other _____																	
NAME OF WATER SYSTEM COUNTY PWS UNITED WATER LEXINGTON HILLS ADA 4010201																	
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420																	
SEND ADDITIONAL COPIES TO: DEQ - BOISE																	
IF RETEST, ORIGINAL SAMPLE DATE																	
Phone (208) 362-7371 Ext Fax (208) 362-1479 email CHILLED 10 C X YES NO																	
COLLECTED BY: D MCCLUNG TRANSPORTED BY: D MCCLUNG																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>SAMPLE TYPE</th> <th>COLLECTION DATE/TIME</th> <th>Sampling Location</th> <th>Cl res</th> <th>TOTAL COLIFORMS</th> <th>FECAL COLIFORMS</th> <th>E. COLI</th> <th>HPC</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>SM 9223</td> <td>SM 9221</td> <td>SM 9223</td> <td>SM 9215</td> </tr> </table>		SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS	FECAL COLIFORMS	E. COLI	HPC					SM 9223	SM 9221	SM 9223	SM 9215
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS	FECAL COLIFORMS	E. COLI	HPC										
				SM 9223	SM 9221	SM 9223	SM 9215										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 5%;">S</td> <td style="width: 10%;">8/17/2004</td> <td style="width: 20%;">LAB# 0427506</td> <td rowspan="2" style="width: 5%;">0.3</td> <td rowspan="2" style="width: 15%;">ABSENCE</td> <td rowspan="2" style="width: 15%;"></td> <td rowspan="2" style="width: 15%;">ABSENCE</td> <td rowspan="2" style="width: 10%;"></td> </tr> <tr> <td>8:00</td> <td>FIRE HYDRANT NEAR WELL</td> </tr> </table>		S	8/17/2004	LAB# 0427506	0.3	ABSENCE		ABSENCE		8:00	FIRE HYDRANT NEAR WELL						
S	8/17/2004		LAB# 0427506	0.3						ABSENCE		ABSENCE					
	8:00	FIRE HYDRANT NEAR WELL															

REMARKS: ANALYTICAL METHODS <u>Total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985 SM 9221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods... 16th ed., 1985 SM 9223 mIQ-MUG Test Per 40 CFR 141.21(f)(3)(iv) HPC Pour Plate, Part 907, Standard Methods... 16th ed., 1	ANALYST: LM Analytical Laboratories, Inc.  Laboratory Supervisor
<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C, Standard Methods... 16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods... 16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(c)(7) and 40 CFR 141.21(f)(5)(iii)	

SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) - Enforcement (chain of custody) Upstream repeat Downstream repeat Other Repeat W - Untreated V - Invalidated by Lab C - Construction / Special	ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com X Public Water Supply Private Water Supply Other _____		
NAME OF WATER SYSTEM UNITED WATER IDAHO-LEXINGTON HILLS		COUNTY ADA	PWS 4010201
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420		DATE RECEIVED 9/7/2004	
		TIME RECEIVED 14:30	
		DATE ANALYZED 9/7/2004	
		TIME ANALYZED 17:00	
SEND ADDITIONAL COPIES TO: DEQ - BOISE		IF RETEST, ORIGINAL SAMPLE DATE	
Phone (208) 362-7371	Ext	Fax (208) 362-1479	email
COLLECTED BY: S FRISBEE		TRANSPORTED BY: S FRISBEE	
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	CI res
			TOTAL COLIFORMS SM 9223
			FECAL COLIFORMS SM 9221
			E. COLI SM 9223
			HPC SM 9215
S	9/7/2004 10:45	LAB# 0429876 LEXINGTON HILLS #1 4"	0.0
		ABSENCE	ABSENCE

REMARKS: ANALYTICAL METHODS <u>Total Coliforms</u> 22 Membrane Filter Technique, Parts 908 and 909A, Standard Methods...16th ed.,1985 M 9221 Multiple Tube Fermentation, Parts 908 and 909A, and 908B, Standard Methods...16th ed.,1985 SM 9223 MMO-MUG Test Per 40 CFR141.21(f)(3)(IV) HPC Pour Plate, Part 907, Standard Methods... 16th ed., 1	ANALYST: Robert L. Voermans Analytical Laboratories, Inc.  Laboratory Supervisor
<u>Fecal Coliforms</u> Membrane Filter Technique, Parts 908C... Standard Methods...16th ed.,1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods...16th ed.,1985 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(6)(III)	

SAMPLE TYPE CODE S - Routine Sample P - Repeat sample (at original tap) E - Enforcement (chain of custody) U - Upstream repeat ~ - Downstream repeat Other Repeat ~ - Untreated V - Invalidated by Lab C - Construction / Special		ANALYTICAL LABORATORIES, INC. ID00020 1804 N. 33rd Street Boise, Idaho 83703 1-800-574-5773 1-208-342-5515 www.analyticallaboratories.com		RECEIVED OCT - 1 2004 UNITED WATER	
X Public Water Supply		Private Water Supply		Other	
NAME OF WATER SYSTEM UNITED WATER IDAHO LEXINGTON HILLS			COUNTY ADA		PWS 4010201
REPORT RESULTS TO: CAMILLE BROWN UNITED WATER IDAHO P O BOX 190420 BOISE, ID 83719-0420			DATE RECEIVED 9/22/2004 TIME RECEIVED 11:35 DATE ANALYZED 9/22/2004 TIME ANALYZED 13:00		
SEND ADDITIONAL COPIES TO: DEQ - BOISE			IF RETEST, ORIGINAL SAMPLE DATE		
Phone (208) 362-7371	Ext	Fax (208) 362-1479	email	CHILLED 10 C	☒ YES ☐ NO
COLLECTED BY: S FRISBEE			TRANSPORTED BY: S FRISBEE		
SAMPLE TYPE	COLLECTION DATE/TIME	Sampling Location	Cl res	TOTAL COLIFORMS SM 9223	FECAL COLIFORMS SM 9221
				E. COLI SM 9223	HPC SM 9216
S	9/22/2004 7:30	LAB# 0432168 1930 STONYBROOK CT	0.5	ABSENCE	ABSENCE

REMARKS:	ANALYST: RLV
ANALYTICAL METHODS <u>Total Coliforms</u> SM 9222 Membrane Filter Technique, Parts 909 and 909A, Standard Methods...16th ed., 1985 A 9221 Multiple Tube Fermentation, Parts 908 and 908A, and 908B, Standard Methods...16th ed., 1985 SM 9223 MMO-MUG Test Per 40 CFR 141.21(f)(3)(IV)	Analytical Laboratories, Inc.  Laboratory Supervisor
HPC Pour Plate, Part 907, Standard Methods... 16th ed., 1	Fecal Coliforms Membrane Filter Technique, Parts 908C, Standard Methods...16th ed., 1985 Membrane Filter Technique, Parts 909 and 909A, Standard Methods...16th ed., 1985 <u>E. coli</u> MUG Test Per 141.214(x)(7) and 40 CFR 141.21(f)(6)(III)

**LEXINGTON HILLS INC EM2 (PWS 4010201)
SOURCE WATER ASSESSMENT FINAL REPORT**

January 24, 2002



**State of Idaho
Department of Environmental Quality**

Disclaimer: This publication has been developed as part of an informational service for the source water assessments of public water systems in Idaho and is based on data available at the time and the professional judgement of the staff. Although reasonable efforts have been made to present accurate information, no guarantees, including expressed or implied warranties of any kind, are made with respect to this publication by the State of Idaho or any of its agencies, employees, or agents, who also assume no legal responsibility for the accuracy of presentations, comments, or other information in this publication. The assessment is subject to modification if new data is produced.

Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. This assessment is based on a land use inventory of the designated assessment area and sensitivity factors associated with the wells and aquifer characteristics.

This report, *Source Water Assessment for Lexington Hills Inc EM2, Eagle, Idaho*, describes the public drinking water system, the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Lexington Hills Inc EM2 drinking water system consists of two ground water wells. Both wells rate moderate susceptibility to inorganic, volatile organic, synthetic organic, and microbial contamination. Well #2 automatically rates high for inorganic contamination. The potential contaminant sources are Highway 55, a sand and gravel pit, a cemetery, an excavation contractor, and agricultural land uses. Moderate hydrologic sensitivity and moderate to low system construction scores influenced the overall scores the most.

Neither of the wells has recorded the presence of synthetic organic or volatile organic contamination during any water chemistry tests. The inorganic contaminants fluoride, barium, arsenic, nitrate and chromium have been detected, but at levels below the current maximum contaminant levels (MCLs) as set by the U.S. Environmental Protection Agency (EPA). Well #2 exceeded the MCLs for hydrogen sulfide and iron in September 1993, and for manganese and iron in September 1996. Total coliform bacteria have never been detected in either well. Though the drinking water system is not currently in violation of current regulations, Lexington Hills Inc EM2 should be aware that the potential for contamination still exists.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific use.

For Lexington Hills Inc EM2, drinking water protection activities should first focus on correcting any deficiencies outlined in the sanitary survey. Additionally, there should be a focus on implementation of practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water areas. No potential contaminants should be allowed within 50 feet of any of the wellheads. Any spills from any of the potential contaminant sources should be quickly dealt with, as should any future development within the delineation area. Much of the designated protection areas are outside the direct jurisdiction of Lexington Hills Inc EM2, making collaboration and partnerships with state and local agencies and industry groups critical to the success of drinking water protection.

All wells should maintain sanitary standards regarding wellhead protection. Should microbial contamination become a problem, appropriate disinfection practices would need to be implemented.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan as the delineations contain some urban and residential land uses. Public education topics could include proper lawn and garden care practices, household hazardous waste disposal methods, proper care and maintenance of septic systems, and the importance of water conservation to name but a few. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the EPA. As there are major transportation corridors through the delineations, the Idaho Department of Transportation should be involved in protection activities. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the Ada County Soil Conservation District, and the Natural Resources Conservation Service.

A community must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Boise Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR LEXINGTON HILLS INC EM2, EAGLE, IDAHO

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand the results of this assessment.** Maps showing the delineated source water assessment areas and the inventories of significant potential sources of contamination identified within those areas are attached. The lists of significant potential contaminant source categories and their rankings used to develop the assessment are also attached.

Background

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area and sensitivity factors associated with the wells and aquifer characteristics.

Level of Accuracy and Purpose of the Assessment

Since there are over 2,900 public water sources in Idaho, there is limited time and resources to accomplish the assessments. All assessments must be completed by May of 2003. An in-depth, site-specific investigation of each significant potential source of contamination is not possible. **Therefore, this assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The Idaho Department of Environmental Quality (DEQ) recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a drinking water protection program should be determined by the local community based on its own needs and limitations. Wellhead or drinking water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Section 2. Conducting the Assessment

General Description of the Source Water Quality

The public drinking water system for Lexington Hills Inc EM2 is comprised of two ground water wells that serve approximately 1,300 people through approximately 613 connections. The wells are located in Ada County, to the northeast of the City of Eagle (Figure 1).

Well #1 has no significant water chemistry problems. Well #2, however, has exceeded the EPA maximum contaminant levels (MCLs) for hydrogen sulfide and iron in September 1993 and for manganese and iron in September 1996. Additionally, there have been detections in the tested well water of the inorganic contaminants (IOCs) fluoride, barium, arsenic, chromium, and nitrate at levels below the current MCLs. Total coliform bacteria were detected in Well #2 and the distribution system in December 1994. No volatile organic contaminants (VOCs), synthetic organic contaminants (SOCs), or total coliform bacteria have been detected in the well water.

Defining the Zones of Contribution – Delineation

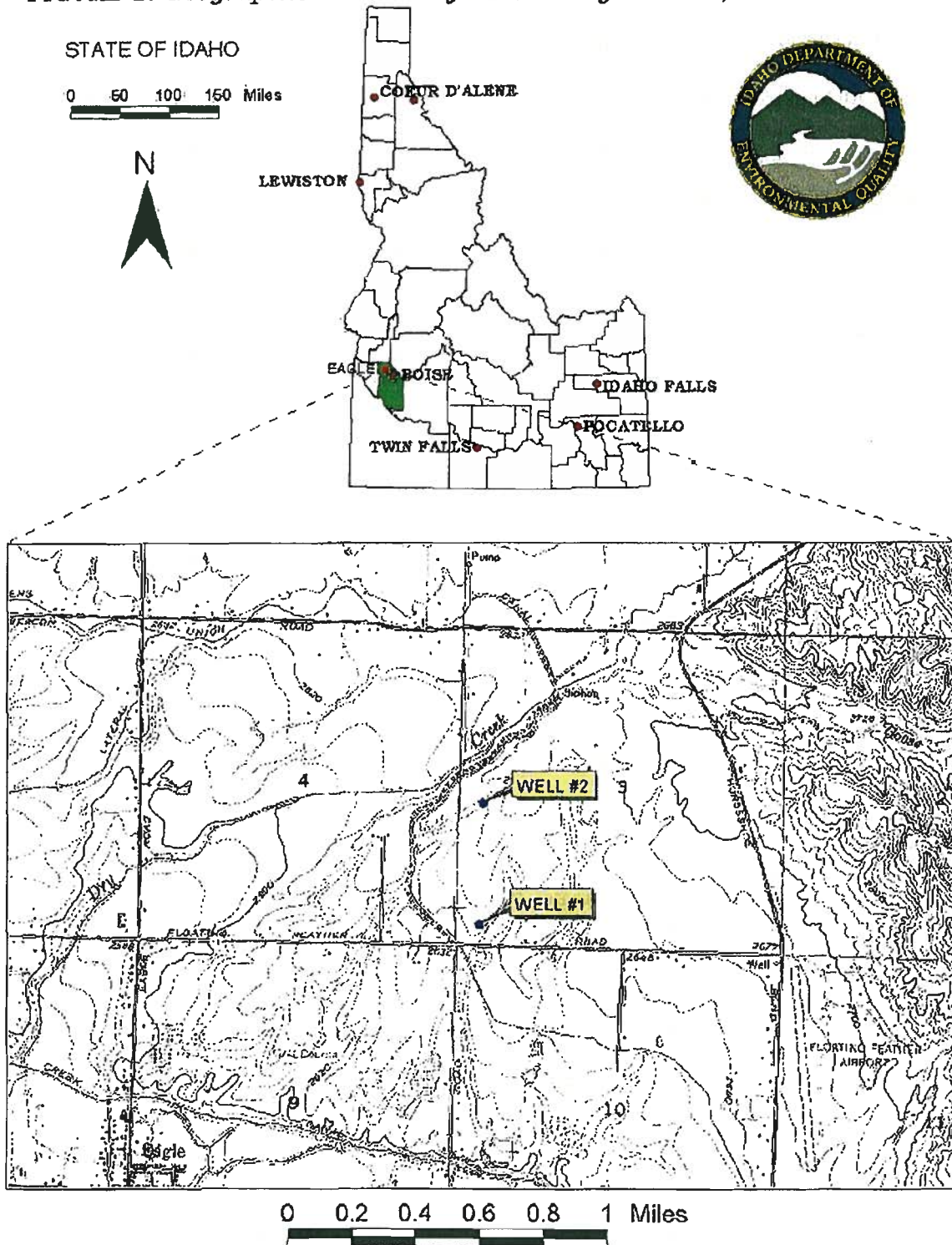
The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time-of-travel (TOT) zones (zones indicating the number of years necessary for a particle of water to reach a well) for water in the aquifer. DEQ contracted with BARR Engineering to perform the delineations using a combination of MODFLOW and a refined analytical element computer model approved by the EPA in determining the 3-year (Zone 1B), 6-year (Zone 2), and 10-year (Zone 3) TOT for water associated with the Boise Valley aquifer in the vicinity of Lexington Hills Inc EM2. The computer models used site specific data, assimilated by BARR Engineering from a variety of sources including the Lexington Hills Inc EM2 well logs, other local area well logs, the Treasure Valley Hydrologic Project, and hydrogeologic reports (detailed below).

Treasure Valley Hydrologic Project Information (Petrich and Urban, 1996; Neely and Crockett, 1998; Petrich et al., 1999)

The "Treasure Valley" is a geopolitical region that includes the lower Boise River sub-basin. The lower Boise River sub-basin begins where the Boise River exits the mountains near the Lucky Peak Reservoir. From Lucky Peak Dam the lower Boise River flows about 64 (river) miles northwestward through the Treasure Valley to its confluence with the Snake River. The Treasure Valley Hydrologic Project area encompasses the lower Boise River area, and extends south to the Snake River. The southern area is included in the study area because of ground water flow from the Lower Boise River basin south toward the Snake River.

Significant amounts of desert area were converted to flood irrigated agriculture beginning in the 1860s. Irrigation led to increases in shallow ground water levels in some areas. The shallow ground water levels provided an inexpensive and readily obtainable water supply that is used extensively throughout the valley. Much of the population growth in the Treasure Valley has been occurring in previously flood-irrigated agricultural areas, resulting in increased pumpage and a reduction in local aquifer recharge.

FIGURE 1. Geographic Location of EM2 Lexington Hills, Inc.



Aquifer Systems and Hydrogeologic Characteristics

Ground water for municipal, industrial, rural domestic, and irrigation uses in the Treasure Valley is drawn almost entirely from Snake River Group and Idaho Group aquifers. Many domestic wells draw water from shallow aquifers, such as those in the Snake River Group deposits. Larger production wells (for municipal and agricultural uses) draw water from the deeper Idaho Group sediments.

Aquifers contained in the Snake River and Idaho Group sediments comprise shallow and regional ground water flow systems. Shallow aquifers contained in Snake River Group sediments and basalts may belong to local flow systems. Most local flow system recharge stems from irrigation infiltration and channel (e.g., streams or canals) losses. Discharge from shallow, local flow systems often is to local drains or streams. The time from recharge to discharge in shallow flow systems (residence times) probably ranges from days to tens of years.

In contrast, regional ground water flow systems extend much deeper than local flow systems. The Treasure Valley regional flow system begins in the eastern part of the valley, as indicated by downward hydraulic gradients in the Boise Fan sediments described by Squires et al. (1992). Some water also enters the regional flow system as underflow from the Boise Foothills in the northeastern part of the valley. The regional flow system is thought to discharge primarily to the Boise and Snake Rivers in the western and southwestern parts of the valley.

Aquifer material characteristics, material heterogeneity, and structural controls influence Treasure Valley ground water flow. Coarse-grained materials (e.g., sand and gravel) in upper zones are more capable of transmitting ground water than fine-grained sediments (e.g., silt and clay). Clay and silt in the Snake River sediments can restrict vertical and/or horizontal ground water movement. Perched aquifers are created when fine-grained lenses impede downward vertical flow. A distinctive clay layer, sometimes referred to as "blue clay," is present over large portions of the valley. The clay is absent in the easternmost portions of the lower Boise River Basin, but can reach a thickness of more than 200 feet toward the central and western portions of the basin.

Sequences of interbedded sand, silt, and clay, such as the Deer Flat Surface and the upper portion of the Glens Ferry Formation of the upper Idaho Group in the Nampa-Caldwell area, are the major water-producing aquifers in a large part of Canyon County (Anderson and Wood, 1981). The coarse-grained sediments in this zone produce water in excess of 2,000 gallons per minute (gpm).

The delineated source water assessment areas for Lexington Hills Inc EM2 can best be described as southeast trending corridors approximately 2 ½ miles long and ¼ mile wide (Figures 2 and 3). The actual data used by BARR Engineering in determining the source water assessment delineation areas are available from DEQ upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination.

The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by DEQ and from available databases compiled in 1998 and 1999.

Land use within the immediate area of the Lexington Hills Inc EM2 wellheads consists of residential, commercial, and transportation corridor uses, while the surrounding area is predominantly irrigated agriculture and under development.

It is important to understand that a release may never occur from a potential source of contamination provided they are using best management practices. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, including educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply well.

Contaminant Source Inventory Process

A two-phased contaminant inventory of the study area was conducted in September and October 2001. The first phase involved identifying and documenting potential contaminant sources within the Lexington Hills Inc EM2 source water assessment areas (Figures 2 and 3) through the use of computer databases and Geographic Information System maps developed by DEQ. The second, or enhanced, phase of the contaminant inventory involved contacting the operator to identify and add any additional potential sources in the area.

The delineated source water areas contain a transportation corridor (Highway 55), a sand and gravel pit, a cemetery, an excavating contractor, and agricultural land uses. Spills occurring on the transportation corridors could contribute all classes of contamination to the aquifer. The potential contaminant sources associated with each of the wells are detailed below Tables 1 and 2.

Table 1. Lexington Hills Inc EM2 Well #1, Potential Contaminant Inventory

SITE #	Source Description ¹	TOT Zone ² (years)	Source of Information	Potential Contaminants ³
1	Cemetery	3-6	Database Search	IOC, SOC
2	Sand and gravel pit	3-6	Database Search	IOC
	Highway 55	3-6	GIS Map	IOC, VOC, SOC

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 2. Lexington Hills Inc EM2 Well #2, Potential Contaminant Inventory

SITE #	Source Description ¹	TOT Zone ² (years)	Source of Information	Potential Contaminants ³
	Highway 55	3-6	GIS Map	IOC, VOC, SOC
1	Excavating Contractor	6-10	Database Search	IOC, VOC, SOC

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

In addition, irrigation in some areas has become more efficient, reducing the amount of irrigation-related infiltration. Decreasing aquifer recharge and increasing pumpage is thought to be contributing to decreasing ground water levels in some areas.

The Treasure Valley experiences a temperate and arid-to-semiarid climate. Average high temperatures range from about 90°F in summer to 36°F in winter; low temperatures range from about 20°F in winter to about 56°F in summer. The average precipitation ranges from about 8 to 14 inches throughout most of the valley, most of which falls during the colder months.

Major surface water bodies include the Boise River, Lake Lowell, and Lucky Peak Reservoir. The primary source of surface water in the Treasure Valley is precipitation falling in the high elevation area in the Boise River basin upstream of Lucky Peak Dam. Much of the runoff from high elevation areas is stored in three reservoirs: Anderson Ranch Reservoir, Arrowrock Reservoir, and Lucky Peak Reservoir.

The region's croplands are irrigated primarily with surface water through an extensive network of reservoirs and canals. The first canals were constructed in the 1860's; there are now over 1,100 miles of major and intermediate canals in the Treasure Valley. The primary sources of the irrigation water in the Treasure Valley include the Boise, Snake, and Payette Rivers. The majority of canals are owned and maintained by canal companies and irrigation districts.

Hydrogeology (from Petrich et al., 1999)

The lower Boise River sub-basin (Treasure Valley) is located within the northwest-trending topographic depression known as the western Snake River Plain. The western Snake River Plain is a relatively flat lowland separating Cretaceous granitic mountains of west-central Idaho from the granitic/volcanic Owyhee mountains in southwestern Idaho. The western Snake River Plain extends from about Twin Falls, Idaho northwestward to Vale, Oregon. The Snake River Plain is about 30 miles wide in the section containing the lower Boise River.

Sediments originating from the surrounding mountains began accumulating on top of thick, basal basalts. Rifting and continued subsidence maintained the lowland topography, leading to the additional accumulation of water and sediments (Othberg, 1994). Basin infilling by sediments and basalt occurred from the late Miocene through the late Pliocene (Othberg, 1994). Incision caused by flowing water in major drainages (e.g., Snake and Boise Rivers) began in the late Pliocene or early Pleistocene, although deposition of coarse sediments continued during Quaternary glaciations (Othberg, 1994).

Several Quaternary basalt flows have been described in the western Snake River Plain, and have been assigned to the upper Snake River Group (Malde, 1991; Malde and Powers, 1962). Lava flowed across portions of the ancestral Snake River Valley (Malde, 1991) in an area that is now south of the Boise River. The Snake River then changed course, incising at its present location along the southern margin of the basalt flows. More recent eruptions (from Kuna Butte and other local sources) spilled lava into the canyon south of Melba. The Snake River has since incised this basalt (Malde, 1991).

The general stratigraphy of the western Snake River Plain consists of (from top to bottom) a thick layer of sedimentary deposits underlain by a thick series of basalt flows, which in turn are underlain by older, tuffaceous sediments and basalt (Malde, 1991; Clemens, 1993). The upper thick zone of sediments (up

to approximately 6,000 feet thick) distinguishes the western Snake River Plain from the eastern Snake River Plain, in which the upper section is primarily Quaternary basalt (Wood and Anderson, 1981).

The uppermost sediments and basalt belong to the Pleistocene-age Snake River Group. The Snake River Group consists of terrace sediments, Quaternary alluvium, and Pleistocene basalt flows (Wood and Anderson, 1981). Snake River Group sediments and basalts cover much of the project area (Othberg and Stanford, 1992).

The Snake River Group overlies the Idaho Group sediments. The Idaho Group sediments can be divided into two general parts (Wood and Anderson, 1981). The lower Idaho Group contains sediments described as lake and stream deposits of buff white, brown, and gray sand, silt, clay, diatomite, numerous thin beds of vitric ash, and some basaltic tuffs. The upper part of the lower Idaho Group also contains some local, thin, basalt flows. The upper Idaho Group consists of sands, claystones, and siltstones, but differs from the lower Idaho Group in that it contains a greater percentage of coarser-grained materials. The upper Idaho Group are associated with a fluvial/deltaic/lacustrine depositional environment; the lower Idaho Group sediments were deposited in more of a lacustrine/deltaic environment (Wood, 1994).

Wood (1994) identified a buried lacustrine delta within the Idaho Group sediments in the Nampa-Caldwell area. The location of the delta in the middle of the western Snake River Plain suggests that the eastern part of the Boise River basin was delta plain and flood plain at the time of deposition, while the western part was a deep lake environment. The delta probably prograded northwestward into a lake basin 830 feet deep, based upon high resolution seismic reflection data and resistivity log interpretations. The delta-plain and front sediments were shown to be mostly fine-grained, well-sorted sand with thin layers of mud (Wood, 1994). The northwest trend of the delta indicates a sediment source to the southeast, such as where the Snake River flows today (Wood, 1994).

A substantial, laterally extensive layer of clay is found at depths of 300 to 700 feet below ground surface. The clay is important because it represents, in some areas, a significant aquitard separating shallow overlying aquifers from deeper zones. The clay, often described in well logs as having a blue or gray color, has been observed as far west as Parma, and as far east as Boise (although the clay is not found in the extreme eastern portions of the Treasure Valley). The clay varies from a few feet to a few hundred feet in thickness. Although significant layers of clay are present throughout the Idaho Group sediments, individual clay units are not necessarily continuous over large areas. Also, the top of the clay can vary in elevation by up to approximately 200 feet in some locations, such as in an area west of Lake Lowell. In general, sediments above the "blue clay" are coarser-grained than the interbedded sands, silts, and clays underlying the "blue clay."

The top of the upper Idaho Group is marked in several parts of the Treasure Valley by a widespread fluvial gravel deposit known as the Tenmile Gravels. Tenmile Gravels contain rounded granitic rocks and felsic porphyries originating from the Idaho Batholith to the north and northeast. The Tenmile gravels range up to 500 feet in thickness along the Tenmile Ridge south of Boise, but are less than 50 feet thick in the Nampa-Caldwell area (Wood and Anderson, 1981).

Figure 2. EMD Lexington Hills Inc. Delineation Map and Potential Contaminant Source Locations

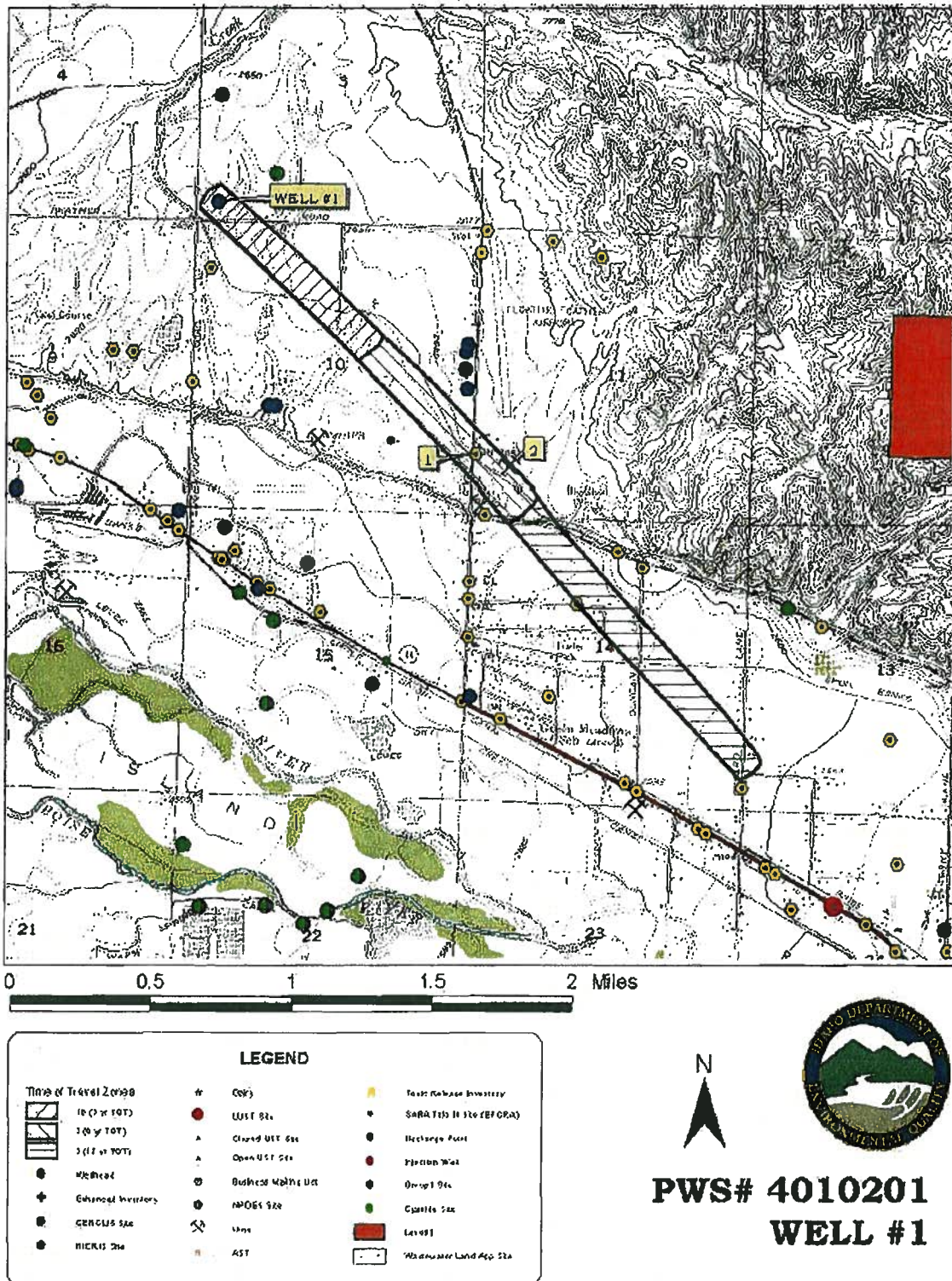
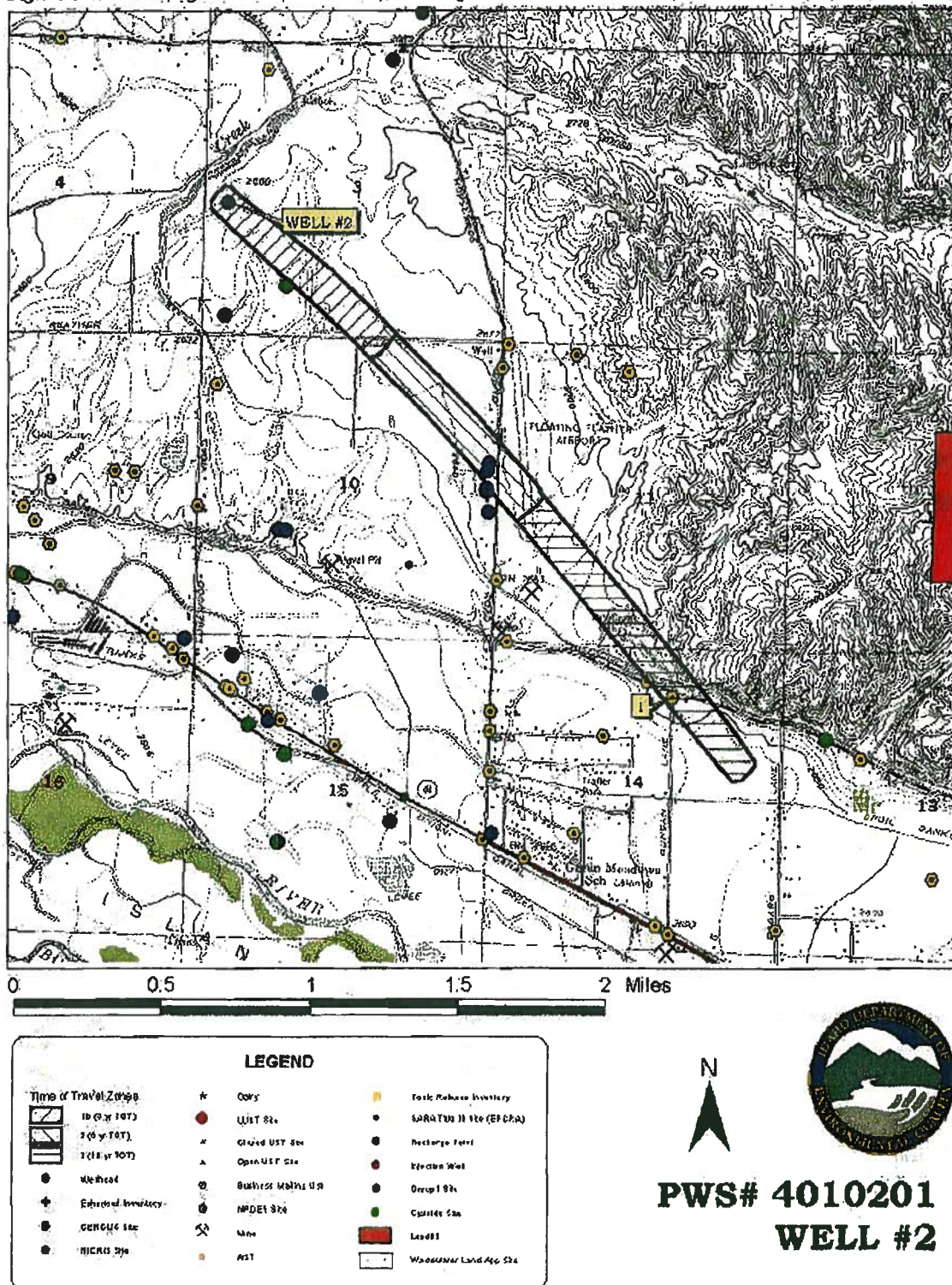


Figure 3. EM2 Lexington Hills Inc. Delineation Map and Potential Contaminant Source Locations



Section 3. Susceptibility Analyses

The susceptibility to contamination for each well was ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity of the well, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the well is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. Attachment A contains the susceptibility analysis worksheets. The following summaries describe the rationale for the susceptibility ranking.

Hydrologic Sensitivity

The hydrologic sensitivity of a well is dependent upon four factors: the surface soil composition, the material in the vadose zone (between the land surface and the water table), the depth to first ground water, and the presence of fine-grained geologic material above the producing zone of the well. Slowly draining soils such as silt and clay typically are more protective of ground water than coarse-grained soils such as sand and gravel. Similarly, fine-grained sediments in the subsurface and a water depth of more than 300 feet protect the ground water from contamination.

Hydrologic sensitivity is moderate for both wells (Table 4). Regional soil data indicate the presence of poorly to moderately drained soils in the area of the delineation. The vadose zone near the wellheads consists of sandy loam, river rock, coarse sand, pea gravel, and clay in various proportions. The water table is located within 100 feet of the ground surface. Neither well has greater than 50 feet of low permeability clay between the ground surface and the producing zones.

Well Construction

Well construction directly affects the ability of the well to protect the aquifer from contaminants. System construction scores are reduced when information shows that potential contaminants will have a more difficult time reaching the intake of the well. Lower scores imply a system is less vulnerable to contamination. For example, if the well casing and annular seal both extend into a low permeability unit, then the possibility of contamination is reduced and the system construction score goes down. If the highest production interval is more than 100 feet below the water table, then the system is considered to have better buffering capacity. If the wellhead and surface seal are maintained to standards, as outlined in sanitary surveys, then contamination down the well bore is less likely. If the well is protected from surface flooding and is outside the 100-year floodplain, then contamination from surface events is reduced.

A sanitary survey was conducted in 1999. Well #1 rated low for system construction. Well #2 rated moderate for system construction. The main difference between the two wells was the added information for Well #1 designating which geologic units the casing and annular seal were placed into. Information regarding the two wells is summarized below (Table 3).

Table 3. Lexington Hills Inc EM2, Well Construction Summary Information

Well	Well Depth (ft)	Static Water Level (ft)	Casing: diameter/ thickness (in)	Casing: depth (ft)/ formation	Surface seal: depth (ft)/ formation	Screened Interval (ft)	Drill Year	Sanitary Survey Elements (A/B) ¹
Well #1	405	68	16/0.250	405/Blue clay	90/Fine sand	215-265. 375-385	1991	Yes/Yes
Well #2	615	74	16/NI	NI/NI	115/Brown clay	NI	1992	Yes/Yes

¹ A = Well and surface seal in compliance; B = Protected from surface flooding
NI = no information was available

The available well logs allowed a determination as to whether current public water system (PWS) construction standards are being met. Though the wells may have been in compliance with standards when they were completed, current PWS well construction standards are more stringent. The Idaho Department of Water Resources *Well Construction Standards Rules* (1993) require all PWSs to follow DEQ standards as well. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works* (1997) during construction. Some of the regulations deal with screening requirements, aquifer pump tests, and thickness of casing. Table 1 of the *Recommended Standards for Water Works* (1997) lists the required steel casing thickness for various diameter wells. Ten-inch casing requires 0.365-inch thick casing, and 12-inch and larger casing requires a casing thickness of at least 0.375-inches. Well #1 used 0.250-inch thick casing. Well #2 did not provide enough information regarding the casing or a pump test. Therefore, both wells were assessed an additional point in the system construction rating.

Potential Contaminant Source and Land Use

Well #1 has a moderate land use score for IOCs (i.e. nitrates, arsenic), VOCs (i.e. petroleum products), and SOC (i.e. pesticides) and low for microbial contaminants (i.e. bacteria). Well #2 has a low land use score for all types of contaminants. Agricultural land uses in the delineated source areas account for the largest contribution of points to the potential contaminant inventory ratings. As the number of potential sources varies between the wells, so do the land use scores.

Final Susceptibility Ranking

A detection above a drinking water standard MCL, any detection of a VOC or SOC, or a detection of total coliform bacteria or fecal coliform bacteria at the wellhead will automatically give a high susceptibility rating to a well despite the land use of the area because a pathway for contamination already exists. Additionally, storing potential contaminant sources within 50 feet of a wellhead will automatically lead to a high susceptibility rating. In this case, Well #2 automatically rated high for IOCs because of MCL violations for hydrogen sulfide and iron in September 1993 and for manganese and iron in September 1996. Hydrologic sensitivity and system construction scores are heavily weighted in the final scores. Having multiple potential contaminant sources in the 0- to 3-year time of travel zone (Zone 1B) and agricultural land contribute greatly to the overall ranking. In terms of total susceptibility, except as noted above, both wells rate moderate for all categories.

Table 4. Summary of Lexington Hills Inc EM2, Susceptibility Evaluation

Well	Susceptibility Scores ¹									
	Hydrologic Sensitivity	Contaminant Inventory				System Construction	Final Susceptibility Ranking			
		IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials
Well #1	M	M	M	M	L	L	M	M	M	M
Well #2	M	L	L	L	L	M	H* ²	M	M	M

¹H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility,

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

²H* = Well automatically scored high due to MCL violations for iron, manganese, & hydrogen sulfide.

Susceptibility Summary

Except for Well #2 IOCs, both wells rate moderate for all categories. Well #2 automatically rates high for IOCs due to MCL violations to hydrogen sulfide, manganese, and iron.

Well #1 has no significant water chemistry problems. Well #2, however, has exceeded the EPA MCLs for hydrogen sulfide and iron in September 1993 and for manganese and iron in September 1996. Additionally, there have been detections in the tested well water of the IOCs fluoride, barium, arsenic, chromium, and nitrate at levels below the current MCLs. Total coliform bacteria were detected in Well #2 and the distribution system in December 1994. No VOCs, SOC, or total coliform bacteria have been detected in the well water.

Section 4. Options for Drinking Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a well receives, protection is always important. Whether the well is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective drinking water protection program is tailored to the particular local drinking water protection area. A community with a fully developed source water protection program will incorporate many strategies. For Lexington Hills Inc EM2, drinking water protection activities should first focus on correcting any deficiencies outlined in the sanitary survey. Additionally, there should be a focus on implementation of practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water areas. No potential contaminants are allowed within 50 feet of any of the wellheads (IDAPA 58.01.08.550). Any spills from any of the potential contaminant sources should be quickly dealt with, as should any future development within the delineation area. Much of the designated protection areas are outside the direct jurisdiction of Lexington Hills Inc EM2, making collaboration and partnerships with state and local agencies and industry groups critical to the success of drinking water protection. All wells should maintain sanitary standards regarding wellhead protection. Should microbial contamination become a problem, appropriate disinfection practices would need to be implemented.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan as the delineations contain some urban and residential land uses. Public education topics could include proper lawn and garden care practices, household hazardous waste disposal methods, proper care and maintenance of septic systems, and the importance of water conservation to name but a few. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the EPA. As there are major transportation corridors through the delineations, the Idaho Department of Transportation should be involved in protection activities. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the local Soil Conservation District, and the Natural Resources Conservation Service.

A community must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Boise Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

Assistance

Public water supplies and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Boise Regional DEQ Office (208) 373-0550

State DEQ Office (208) 373-0502

Website: <http://www2.state.id.us/deq>

Water suppliers serving fewer than 10,000 persons may contact John Bokor, Idaho Rural Water Association, at 1-800-962-3257 for assistance with drinking water protection (formerly wellhead protection) strategies.

POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as **ASuperfund**, is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

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Attachment A

Lexington Hills Inc EM2 Susceptibility Analysis Worksheets

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

0 - 5 Low Susceptibility

6 - 12 Moderate Susceptibility

≥ 13 High Susceptibility

1. System Construction	SCORE	
Drill Date	03/07/1991	
Sanitary Survey (if yes, indicate date of last survey)	YES	1999
Well meets IDWR construction standards	NO	1
Wellhead and surface seal maintained	YES	0
Casing and annular seal extend to low permeability unit	YES	0
Highest production 100 feet below static water level	YES	0
Well located outside the 100 year flood plain	YES	0
Total System Construction Score	1	
2. Hydrologic Sensitivity		
Soils are poorly to moderately drained	YES	0
Vadose zone composed of gravel, fractured rock or unknown	NO	0
Depth to first water > 300 feet	NO	1
Aquifer present with > 50 feet cumulative thickness	NO	2
Total Hydrologic Score	3	
3. Potential Contaminant / Land Use - ZONE IA		
Land Use Zone IA	IRRIGATED CROPLAND	
Farm Chemical use high	NO	2
IOC, VOC, SOC, or Microbial sources in Zone IA	NO	0
Total Potential Contaminant Source/Land Use Score - Zone IA	2	2
Potential Contaminant / Land Use - ZONE IB		
Contaminant sources present (Number of Sources)	NO	0
(Score = # Sources X 2) 8 Points Maximum	YES	0
Sources of Class II or III leacheable contaminants or	YES	4
4 Points Maximum	NO	0
Zone IB contains or intercepts a Group 1 Area	NO	0
Land Use Zone IB	Greater Than 50% Irrigated Agricultural Land	0
Total Potential Contaminant Source / Land Use Score - Zone IB	4	4
Potential Contaminant / Land Use - ZONE II		
Contaminant Sources Present	YES	2
Sources of Class II or III leacheable contaminants or	YES	1
Land Use Zone II	25 to 50% Irrigated Agricultural Land	1
Potential Contaminant Source / Land Use Score - Zone II	4	4
Potential Contaminant / Land Use - ZONE III		
Contaminant Source Present	NO	0
Sources of Class II or III leacheable contaminants or	YES	1
Is there irrigated agricultural lands that occupy > 50% of	YES	1
Total Potential Contaminant Source / Land Use Score - Zone III	2	2
Cumulative Potential Contaminant / Land Use Score	16	11
4. Final Susceptibility Source Score	7	6
5. Final Well Ranking	Moderate	Moderate

Ground Water Susceptibility Report Public Water System Name : LEXINGTON HILLS INC EM2 Well# : WELL 2 11/01/2001 2:32:23 PM
 Public Water System Number 4010201

1. System Construction		SCORE
Drill Date		04/14/1992
Sanitary Survey (if yes, indicate date of last survey)		1999
Well meets IDWR construction standards		1
Wellhead and surface seal maintained		0
Casing and annular seal extend to low permeability unit		2
Highest production 100 feet below static water level		1
Well located outside the 100 year flood plain		0
Total System Construction Score		4
2. Hydrologic Sensitivity		
Soils are poorly to moderately drained		0
Vadose zone composed of gravel, fractured rock or unknown		0
Depth to first water > 300 feet		1
Aquifer present with > 30 feet cumulative thickness		2
Total Hydrologic Score		3
3. Potential Contaminant / Land Use - ZONE 1A		
Land Use Zone 1A		1
Farm chemical use high		0
IOC, VOC, SOC, or Microbial sources in Zone 1A		YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		1
Potential Contaminant / Land Use - ZONE 1B		
Contaminant sources present (Number of Sources)		0
Sources of Class II or III leacheable contaminants or		0
(Score = # Sources X 2) 8 Points Maximum		0
Zone 1B contains or intercepts a Group 1 Area		0
4 Points Maximum		0
Land Use Zone 1B		0
Less Than 25% Agricultural Land		0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0
Potential Contaminant / Land Use - ZONE II		
Contaminant Sources Present		2
Sources of Class II or III leacheable contaminants or		1
Land Use Zone II		1
Greater Than 50% Irrigated Agricultural Land		2
Potential Contaminant Source / Land Use Score - Zone II		5
Potential Contaminant / Land Use - ZONE III		
Contaminant Source Present		1
Sources of Class II or III leacheable contaminants or		1
Is there irrigated agricultural lands that occupy > 50% of		1
Total Potential Contaminant Source / Land Use Score - Zone III		3
Cumulative Potential Contaminant / Land Use Score		9
4. Final Susceptibility Source Score		9
5. Final Well Ranking		High* Moderate Moderate Moderate

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Revised November 2005

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APPENDIX L – Manufacturers' Maintenance Manuals

- 1. Danfoss – VFD unit for 75 hp pump**
- 2. Danfoss – VFD unit for 30 hp pump**
- 3. CLA-VAL – Automatic Control Valves**
- 4. ABB – Master Meter**

Volume One (Bound Separately)

City of Eagle Water System

- Meters
- Valves
- Blowoff Valves
- Hydrants
- ▲ UWID_PRV
- ▲ Eagle PRV
- Wells
- Services
- 2 Inch Main
- 4 Inch Main
- 6 Inch Main
- 8 Inch Main
- 10 Inch Main
- 12 Inch Main
- 16 Inch Main



1 inch equals 400 feet



Revised Date: 11-09-05

