



Cottonwood Creek Homeowners Association- Permit 37-22594 First Fill Analysis Summary

To: Mr. Bill Marshall, IDWR Southern Region Office

From: Zach Latham

Cc: Mr. Allen Merritt, IDWR Southern Region Office

Date: February 7th 2011

Re: Cottonwood Creek Homeowners Association Permit 37-22594 First Fill Analysis Summary

RECEIVED

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DEPT. OF WATER RESOURCES
SOUTHERN REGION

This is a review of Brockway Engineering's first fill analysis of the storage proposed and listed on water right permit 37-22594 in the name of Cottonwood Creek Homeowners Association as requested in a February 7th 2011 telephone call by Mr. Bill Marshall and Mr. Corey Skinner of IDWR. A water right transfer application was filed on February 1st 2011 on behalf of the Cottonwood Creek Homeowners Association by Brockway Engineering which seeks to convert a portion of irrigation water rights 37-577CG and 37-657E to wildlife, recreation and aesthetic uses.

Water right permit 37-22594 seeks to divert a total of 1.45 cfs from the Big Wood River under existing irrigation water rights 37-577CG and 37-657E to fill 5.0 acre feet of wildlife, recreation and aesthetic storage on the Cottonwood Creek Homeowners Association property. The proposed storage features consist of a series of irrigation management ponds. The in-line storage features have been lined and are dug into the ground; they receive water from irrigation ditches, fill up and then spill into the next storage feature (see Figure 1). Multiple pumps in the pond system pump water from the storage ponds into a pressurized irrigation system which is used for irrigation within the subdivision. These irrigation management ponds are designed to improve irrigation efficiency on the property.

The total estimated first fill volume for the entire project is approximately 5.0 acre-feet. Historically, 38.0 acres of grass pasture has required 62.3 acre-feet of water to grow on the property. 3.0 acres of grass pasture (Hailey NWS- Grass Pasture, Low Management (Annual P_{def}) 1.64 ft per acre) are anticipated to be dried up for the first irrigation season to compensate for the first fill volume of 5.0 acre feet.

During the first irrigation season after which the permit is approved it is proposed to dry up the amount of acres with an equivalent consumptive use to account for the volume needed to fill the proposed storage features. The total first fill volume has been estimated to be 5.0 acre-feet. Drying up 3.0 acres of grass pasture that has been historically irrigated for one irrigation season only, will allow 5.0 acre-feet of water to be left in Big Wood River during the first irrigation season when the first fill occurs. Injury to downstream water users is not anticipated to occur because 5.0 acre feet of water historically consumed by grass pasture, will remain in the Big Wood River during the first irrigation season.