MEMO

TO: File DATE: 11-19-1999

FROM: J E STANTON

SUBJECT: Apps. For Permit, Epicenter Aquaculture

On 11-11-99, I spent several hours with applicant Mark Lupher on this property reviewing these applications. He has a 30 year lease on a portion of the former Ingram ranch, and has been there for 5 years. The Ingrams were ranchers, not fish raisers, so had various raceways and ponds at various locations on their property at various times. Lupher has a background in commercial fish production, so he has done away with most of what Ingram had and replaced it with a modern facility. Some dirt ponds and one raceway built by Ingram will be retained if the necessary permits are approved by IDWR, but these facilities are not in use at this time. One Ingram pond will be used a settling pond above the main settling pond on Warm Creek (Warm Springs Creek on the quad map).

Warm Springs Creek is dry when it enters the Lupher property, having been diverted and stored by upstream users. Warm Springs is a series of several springs that flow out of the side of a hill just south of his mobile home. A canal collects these springs, carrying them north to Lupher's fish facility. Water enters the upper raceways (5), flows underground to the lower raceways (12), then to various settling facilities. Some water goes to an old Ingram pond for settling, then runs into Warm Springs Creek. A pond on the creek further settles the water. Some of the water settles in a ditch before being pumped back to the upper raceways for re-use. The ditch also dumps into the pond on the creek. Water in this pond flows out thru a culvert and measuring device to two smaller relift pumps that take it back to the upper raceways. This water eventually gets back into the Warm Springs Canal for use downstream by Mr. Morganroth. According to Lupher, he carefully measures this water so that there is at least as much water going back into the canal as he diverts from it. Water arising below the head of the canal offsets any evaporation loss in the raceways; see discussion below. Two of the upper raceways were closed off to reduce the diversion rate out of the canal to the licensed flow. The brood ponds just south of the raceways are also shut off at this time. The two raceways and the ponds will be put back into production if the necessary water permit is approved.

Below Warm Springs, Warm Springs Creek gets some seepage from the canal where a check dam/overflow structure is located a little north of Lupher's home. Below the check dam is an L-shaped pond and a straight pond formed by a small earth dam on the creek. A culvert and road separates the 2 ponds. Further down the creek, a concrete wall dams up the creek to form another pond. This pond is much smaller than the upstream ponds. The wall has been there for many years, having been built by former owners of the property.

72-07580

A ditch flows out of the west side of the wall, roughly paralleling the main canal but at a lower elevation. A ways below the wall, a dam on the ditch forms a tiny pond to provide head for a 2" pvc pipe that runs 1600' toward the raceways. The pipe is 100' short of the truck-filling area, however. The pipe would use about 0.01 cfs & 6000 gallons of water per week from June thru September to cool live fish that are shipped out (he only sells live tilapia). He put this system in last summer, but has not applied for a permit for this use.

A short distance down the ditch from the check dam, two springs come out of the hillside at the same level as the ditch. According to Lupher, these springs provide most of the flow for the ditch. He has applied for a permit on these springs for fish propagation. This ditch flows into the old Ingram raceway south of the main facility, but could end up anywhere via the pump-back system. Lupher has measured these springs at 1.1 cfs, and has applied for a permit for this amount. The water is being run back into the creek until the permit is approved.

Based on data supplied by Mark, the present facility has a total volume of 48,200 cubic feet, whereas License 72-07209 has a volume of 0.8 acre feet (34,848 cubic feet). These figures do not include any of the settling facilities. Mark said that he harvests fish out the main settling pond about every 5 years, but these fish are escapees from the raceways plus natural production in the pond. Tilapia are great escape artists, so this does not surprise me at all. A pond full of fish is obviously not conducive to the settling process. Since the present facility is almost completely different from what existed at the time of licensing, it is hard to say exactly where the expansion is. I suppose that some of the lower east-facing raceways could be considered an expansion of the licensed facility, although some of the upper raceways and ponds have been temporarily dried up to stay within the licensed flow. Certainly the volume expansion can be covered during licensing if the permit for increased flow from the Warm Springs canal is approved.

I diagrammed this facility, and took numerous photos. Although I did not see it myself, Mark told me that Morganroth was digging at the head of the canal with a cat. The water in the canal was muddy, which was apparently caused by the digging. We looked at the spring area before I left the property, and a cat was parked there. The area was also muddy, indicating recent work. It looked like they had deepened the head of the canal, but I couldn't tell if they were developing new water or just cleaning things out. Nobody was on the cat when we were there. It was dark when I left the property, so I did not try to talk to Morganroth.

The proposed uses on these 4 applications already exist. The systems are already constructed, and have been there for some time. Some are in use and some are ready for use if the permit is approved. The various ponds appear to be under ½ acre in surface area for each application filed, so these are probably demininus and/or non-consumptive uses. The only application that could have any effect on Morganroth is the one for 4.5 cfs from Warm Springs. But Lupher has constructed his system to be non-consumptive, and actually tries to put a little more water back into the main canal than he takes out of it. The Morganroth power plant is several miles downstream from the fish facility, so

there would certainly be some conveyance loss in the long canal. I recall Mark telling me that Morganroth diverts irrigation water above his power plant, thereby reducing the water available for power production, but was not able to confirm this due to time constraints. All these applications appear to be approvable unless the wilderness moratorium prevents it.

Lupher told me that he does not irrigate this property. Pasture areas along Warm Springs Creek are naturally sub irrigated, so no surface application is needed. Some cattle were there during my visit, but raising fish is his main business.