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DEPARTMENT OF NATURAL RESOURCES

Division of Water Rights

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August 30, 2011

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Gentlemen:

We appreciated the opportunity of being involved in the meeting August 16, 2011, with the Washington County Conservancy District, Santa Clara Chairman, and New Castle representatives regarding management and distribution of the Grass Valley water and the trans-basin diversion tunnel. We came away from the meeting feeling it was productive towards resolving a long standing issue and encourage all parties involved to move forward in working out details of an agreement that will eventually be ratified by the involved parties.

After the meeting we took the opportunity to tour the facilities in Grass Valley associated with the diversion tunnel. Being late in the summer, no water was running; this provided for easier access and close inspection. We are encouraged by the progress made over the last few years that will enhance the operation of the system. To document this progress we are providing this letter as an update and status report and offer the following observations and recommendations:

- 1) Grass Valley Dam & Outlet (see photos page 3)

Large rocks have been purposely placed in front of the grating, restricting free outflow from the reservoir. This is the second year this has occurred and previously it has been reported that plastic bags have been placed over this grating. As discussed in the meeting, some provision to prevent this from happening is warranted. A tower inlet structure could accomplish that purpose. Alternatively, water users may wish to consider breaching the structure since no controlled storage benefit appears to be occurring. A pre-runoff inspection should be done each year prior to the opening of the Santa Clara gate. If water is diverted and impounded, Dam Safety Requirements must be met.

2) Santa Clara Gate (see photos page 4)

Effectiveness of the operation of the Santa Clara Gate at a range of flows is dependent on removal of the accumulated sand in front of the gate. Present conditions will allow only a portion of high flows through the gate once it is opened. The accumulation of sand must be removed to allow the gate to function as designed for all flow conditions. The best time to remove this sand accumulation is when the area is dry in the late summer or fall.

3) Tunnel Outlet Measuring Device (see photos page 5)

Near the tunnel outlet New Castle has installed a 12 foot contracted rectangular weir, which is now the measurement point for trans-basin flows. In 2010, New Castle also removed rock from the upstream side of the weir to enhance the stilling basin. Our recent observation indicates that a significant amount of rock has accumulated in the stilling basin for the weir. This should be removed as part of routine annual maintenance during the late-summer/fall dry period. A clean entrance basin will help ensure accurate measurement from this measuring device.

We also inspected the District's recently installed automated measurement equipment on the weir and understand their plans include installing GOES satellite for telemetry to provide remote readings of flow condition when access is restricted due to mud or snow. To ensure consistent readings of the measuring weir, the staff gauge should be re-located on the side of the stilling basin near the location of the float sensor. We are encouraged by the collective working arrangement that has developed between the involved parties. This is demonstrated by construction of the required measuring device and installation of telemetry necessary to monitor the system.

I suggest in addition to the water issues currently under negotiation, an operational agreement which defines responsibilities for future and ongoing maintenance, be considered.

Sincerely,



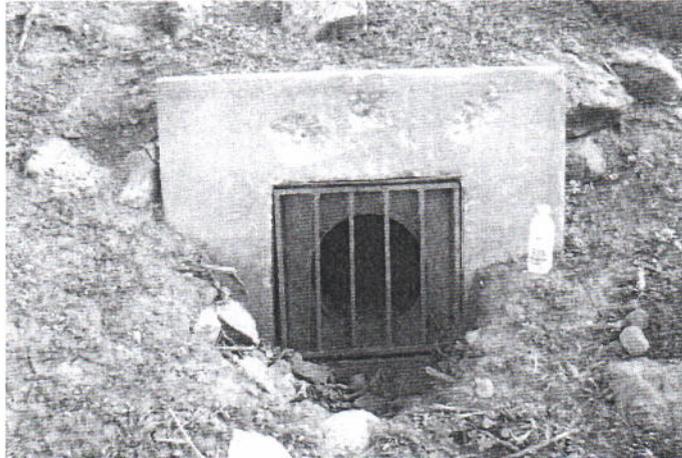
Mike Silva
Distribution Engineer

Enclosure: Photos: Three pages

cc: Kurt Vest, Southwestern Regional Office

1) Grass Valley Pond Outlet:

Outlet Clean and free of debris: 8/16/2010



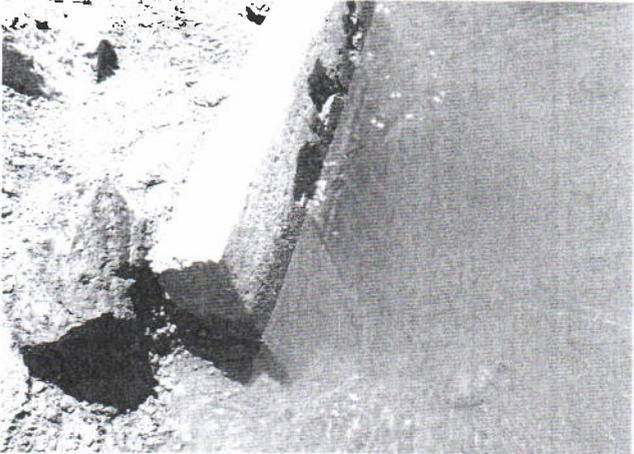
Outlet clogged with rocks: 8/17/2011



Outlet with water, clogged by rocks: 6/16/2010

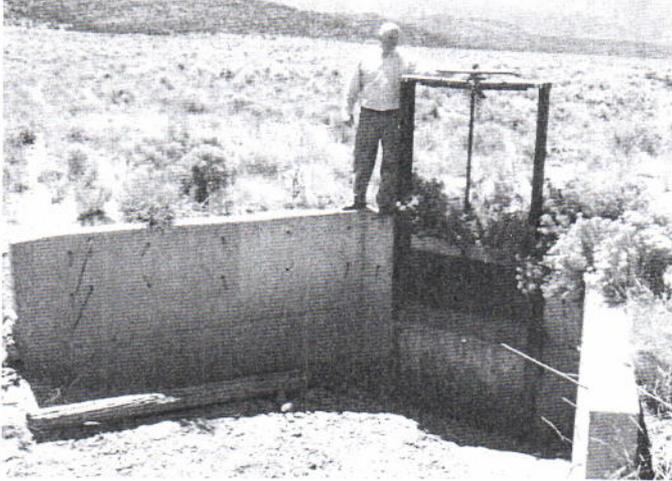


Outlet With rocks removed: 6/16/2010

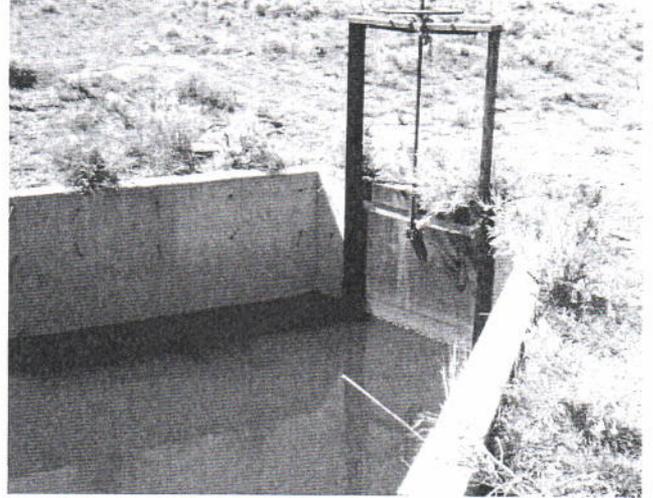


2) Santa Clara Gate

Santa Clara Gate closed without water: 8/17/2011



Santa Clara gate closed with water: 5/4/2010



3) Tunnel Outlet Measuring Weir (Debris in Basin):

Before rocks were removed: 8/23/2010



After rocks removed, new accumulation of debris:
8/17/2011



With water running: 5/4/2010



With water running: 5/25/2010

