

Date; Feb 2014

Re; The Dalles Maintenance List Update Post winter outage 2013/2014

DIFFUSER GRATING – West entrance grating attachment strapping installed. After numerous delays, this concludes a ~12 year effort to replace all north and east fishway diffuser grating. All grating is galvanized and 1” gaps.

LAMPREY MODIFICATIONS – Lamprey plating was installed on floor all lower east ladder orifices with associated diffuser grating via contractor. Plating dimension error resulted in some schedule delay, but this was quickly resolved. New plating was cut and maintenance schedules were adjusted to complete installation.

WEIR WHEELS – Entrance weirs have stainless steel wheels that roll in mild steel guides. Many of the weir guides have been found with excessive wear. A new plastic composite wheel was installed in 1 west entrance weir in 2013. The plastic wheel will extend the life of the weir guides.

EAST EXIT 158/159 WEIRS – Weir 159 was removed from its guide for rehab. Weir and guide damage was greater than expected. New wheels and new rubbers seals were installed on all weir leafs. All guide wear was repaired. Weir 158 is the same design. Since the cost of rehab is near the cost of building new due to red lead paint abatement, we plan to build a new one for install next winter. The old will be used as an available spare.

EAST EXIT FLOW CONTROL WEIRS – Weir 154-157 are showing similar wear. Guides have been repaired on 156 in recent years. Plans are underway to replace all 4 weirs and rehab all guides as needed.

EAST EXIT ELECTRICAL PANEL – FCQ7 electrical panel feeds all power to the east exit weirs and count station. These panels are old and due for upgrade. In addition, water was leaking into the gallery over the panel. Maintenance located leakage source and sealed the leaking conduit, cleared deck drain pipes and are in the process of sealing expansion joints. Additionally, electricians provided resources and plans for a backup power supply in the event of an electrical failure. Long term plans are for replacement of FCQ7 with updated equipment as the budget allows.

COLLECTION CHANNEL DEWATERING PUMPS – The east fishway collection channel has 10 dewatering pumps to allow dewatering of all areas below tailwater. Presently 2 pumps are out of service, one of which is stuck in the Stillwell. All pumps will be removed and electrical conduit design flaws will be addressed. However these cannot be removed until next winter outage period.

EAST ENTRANCE BULKHEAD ISSUES – East entrance dewatering bulkheads are sticking in guides creating problems installing and removing. Seal and steel modification is required. These will be modified through FY14 to be ready for '14/'15 dewatering season.

COLLECTION CHANNEL DIFFUSER VALVES AND GRATING – There are 58 diffuser valves in the collection channel that are no longer used. Plans are to permanently close all diffuser valves, remove the unnecessary equipment obstructing the channel, removed all unmaintained diffuser grating and determine if the voids and diffuser chambers in the floor need to be filled in. This will be very high cost and remains low on priority list.

NORTH LADDER VEGETATION AND ROCK WALLS – Removing vegetation from fishladder walls is an annual effort with some safety concerns. Contractors have been used when funding is available. Goats have been tried, but were not effective in the hard to reach area. Fisheries personnel remove what can be reached. The rock wall integrity is becoming a concern. Portions of the wall are sloughing into the ladder. A geotech from district was tasked to evaluate the area and determine corrective action.