

Bypass Channel

Leave existing dam. Utilize culverts and lengthen/reconstruct existing side channel to divert flows around the dam in attempt to pass fish around.

Biological Factors

- FISH - May not improve fish passage because difficult to achieve enough “attraction flow” for fish to find the culvert entrances.
- SEDIMENT - No change to sediment storage. Sediment would continue to deposit behind the dam.
- FLOW - No change in winter flows and height of water. No change to summer flows because water provided by Fern Ridge and side channel has a controlled intake.

Social and Community Factors

- CITY RIVERFRONT – No change to City’s river views.
- CITY WATER - City’s drinking water intake remains the same. City still needs to look for longer term water solutions.
- CITY PARK - Potential to increase flushing flows in the existing side channel and decrease the algae and opportunity for mosquitoes. A longer bypass channel conflicts with the walking/jogging paths proposed in recreation plan. (A shorter bypass channel would be too steep/erosive to provide sure fish passage without regular maintenance cost).
- IRRIGATION WATER - Irrigation water availability and pump height remain the same.
- AG PUMP SCREENS - Ag producers with unscreened pumps will likely be required (by federal gov) to install screens so juvenile salmon aren’t sucked into pumps. Producers with screens would upgrade next time they replace.
- AG BUFFERS - Regulations on buffers for chemical spraying next to streams could be designated. Not enforced. Spraying enforcement is complaint driven.
- BOATING - No improvement for recreational boating.
- LIABILITY - No improvement; Ongoing cost/risk for accidental death, drowning.

Cost and Feasibility of Funding

- COST - Construction costs will depend on how much excavation required in the historic channel, potentially expensive like all other solutions.
- GRANTS – Not likely since the project will create minimal improvement to fish passage and require maintenance.
- LIABILITY - Dam still in place, remaining an ongoing cost/risk for accidental death, drowning liability to City/Corps.
- MAINTENANCE - Ongoing maintenance costs to keep culverts free from debris and bypass clear of sediment and brush.

Details to be addressed in next phase

- FEASIBILITY - Many details to consider. This is a complex engineered solution that would require estimating and installing specific gradient for the bypass, culvert sizes and water controls for intake culvert. Determine ongoing maintenance actions to clear debris, keep water flowing in bypass, and fix erosion or other challenges to keep it passable for fish.
- CITY RIVERFRONT - Consider location of proposed City footbridge before installing fish bypass.

Community Comments – Please put your sticky notes here - Thanks!