

# Notch Dam

Notch the Dam by removing center. Install boulders & riffles to prevent river from eroding the channel.

- Biological Factors**
- FISH - Improves fish passage for salmon, trout, lamprey and other species. May be some limitation to how well fish passage is improved due to the flow concentrating too much during higher flows.
  - SEDIMENT - Restores sediment distribution.
  - FLOW - Same winter flows and height of water. In summer, water would not pond so it would look like downstream conditions look currently. Summer river flow provided by releases from Fern Ridge dam.

<p><b>Social and Community Factors</b></p>	<ul style="list-style-type: none"> <li>• CITY RIVERFRONT– Potential for notched dam to be a river feature that provides more highly desired aesthetic.</li> <li>• CITY WATER - Include technical solution so City can adjust drinking water intake because water surface elevation above dam site will lower 7'. Simple option is a stronger pump and longer hose. City working on longer term water sources.</li> <li>• CITY PARK – No change; can improve stagnant water in park by letting channel dry out in summer.</li> <li>• IRRIGATION WATER - Irrigation water availability remains the same. Lower 3 ag pumps to reach new lower water level in summer.</li> <li>• 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.</li> <li>• AG BUFFERS - Regulations on buffers for chemical spraying next to streams could be designated. Not enforced. Spraying enforcement is complaint driven.</li> <li>• BOATING – Limited or no improvement for recreational boating (may still need to portage around).</li> <li>• LIABILITY – Potentially decreased liability for City/Corps with lower risk for accidental death/drowning.</li> </ul>
<p><b>Cost and Feasibility of Funding</b></p>	<ul style="list-style-type: none"> <li>• COST – Expensive. For a dam this size, notching is typically same cost as removal. Include boulder/riffles as needed to avoid river erosion</li> <li>• GRANTS - Unsure of willingness of grantors to fund because it's a partial solution.</li> <li>• MAINTENANCE - Part of dam still in place and requires maintenance over time.</li> <li>• LIABILITY - Potential remaining liability to City/Corps as part of dam still in place.</li> </ul>
<p><b>Details to be addressed in next phase</b></p>	<ul style="list-style-type: none"> <li>• FEASIBILITY - Assess integrity of existing concrete; can it be notched?</li> <li>• FISH - Determine notch size to maximize fish passage.</li> <li>• FISH - Determine range of flow conditions that make fish passage possible/impossible.</li> <li>• BRIDGE - Assess potential impacts to upstream Highway 99 bridge footings and solution (project is in contact with ODOT on this).</li> <li>• ENGINEERING DESIGN - Hydraulic and armoring analysis to determine safety/longevity of notched dam.</li> <li>• ENGINEERING DESIGN - Model new water surface elevation to determine number of irrigators impacted and cost associated with adjusting intakes/pumps.</li> </ul>

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