

# DETROIT TEMPERATURE TOWER & DOWNSTREAM PASSAGE PROJECT

## NEPA SCOPING AND PUBLIC ENGAGEMENT

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# PROPOSE EIS LEVEL NEPA

Project construction may require full or partial draw down for as long as two years.

- Potentially high negative impacts on the local economy - highly controversial
- Potential impacts due to sediment mobilization – likely insignificant but need sediment modeling to confirm.
  - Increased turbidity downstream
  - Sedimentation of spawning habitat
  - Impacts to water supply – increased need for filtration
  - Impacts to water quality – contaminated sediments
- Potential impacts to min flows
  - Impacts to Minto Adult Fish Facility (requires 900cfs min)
  - Impacts to water supply



# ALTERNATIVES

## ***Alternative 1. Full Drawdown***

- Construction timeframe: 2 years
- Reservoir elevation allowed to raise in conjunction with progress of work
- Major excavation: blasting and rock removal (excavator, dozers, etc.)
- Construction done in the dry, BMPs in place to avoid impacts to water quality due to excavation
- Access to site by far shore ramp (south) and crane at near shore of dam (north)
- Equipment required: Pile Drivers, concrete trucks, concrete boom trucks, excavators, dozers, dump trucks, miscellaneous trucks

## ***Alternative 2. Partial Drawdown***

Construction timeframe: 2 years - reservoir elevation dependent on coffer dam capabilities and size requirement. Guess: start at a 200ft drawdown for a 6 moth period.

Reservoir elevation allowed to raise in conjunction with progress of work

Major excavation: blasting and rock removal (excavator, dozers, etc.)

Construction done in the dry, BMPs in place to avoid impacts to water quality due to excavation

Access to site by crane at near shore of dam (north)

Equipment required: Pile Drivers, concrete trucks, concrete boom trucks, excavators, dozers, dump trucks, miscellaneous trucks



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# ALTERNATIVES CON'T

## ***Alternative 3. Cofferdam (build in the dry)***

- Construction timeframe: 2 years with reservoir remaining full
- Major excavation: blasting and rock removal (excavator, dozers, etc.)
- Construction done in the dry, BMPs in place to avoid impacts to water quality due to excavation
- Access to site by crane at near shore of dam (north)
- Equipment required: Pile Drivers, concrete trucks, concrete boom trucks, excavators, dozers, dump trucks, miscellaneous trucks
- Likely not technically feasible

## ***Alternative 4. Build in the Wet***

- Construction timeframe: minimum 2 years with normal reservoir elevation allowed
- Major excavation: blasting and rock removal
  - Blasting solids and sediments would be suspended in the reservoir (potentially controlled by floating sediment barriers). Remaining excavation performed by underwater divers.
- Access to site by crane at near shore of dam (north), barge, and boat
- Equipment required: Floating Pile Drivers, dredge ships, concrete trucks, concrete boom trucks, excavators, dozers, dump trucks, miscellaneous trucks, barges, tow boats, miscellaneous boats
- More risks, higher costs, extensive diver work



# PROPOSED NEPA DOCUMENT - ENVIRONMENTAL IMPACT STATEMENT

## Resources of concern

Hydro Power Impact: no power production for up to 2 years (All Alternatives)

### Water Quality Impact:

- Turbidity: Increased due to reservoir sediment transport and slope slumping (Alternatives 1 & 2)
  - Impact water supply operations downstream – increased filtration requirements
- Temperatures: changes downstream (Alternatives 1 & 2)
  - likely look like pre-dam condition
  - summer temps might be higher than existing conditions with a smaller pool (potential for pre spawn mortality, increase temps on incubation)
- TDG: potential impact because Detroit won't be able to buffer as well. Impacts likely to be minimal – low flows mean Big Cliff units can be used but may have to spill at BC (Alternatives 1 & 2)
- Blue Green Algae: bloom can be present in reservoir and may transfer downstream (Alternatives 1 & 2)
- Contaminants (DDT, hydrocarbons, etc.): potential mobilization and release of contaminants downstream in sediments released (Alternatives 1 & 2)



# PROPOSED NEPA DOCUMENT - ENVIRONMENTAL IMPACT STATEMENT

## Resources of concern con't

### Minimum Flows/ Water Supply Impact:

- Flow to likely be reduced below minimum flow requirements during some parts of the year.
- May impact main stem flows with other actions occurring in watershed.

### Listed Species Impact (Chinook and steelhead)

- Impacts to BiOp required flows (Alternative 1 & 2)
- Flow below Minto facility requirements of 900cfs (Alternative 1 & 2)
  - Collection and transport of adults
  - Collection and spawning of adults
  - Acclimation of juvenile steelhead
  - ODFW direct release of steelhead if Minto is shut down - increased straying
- Sediment impact on spawning gravels (Alternative 1 & 2)
- Changes to downstream temps, turbidity, and TDG (Alternative 1 & 2)
- Direct death/harassment or indirect hydroacoustic injury of chinook in the vicinity of underwater blasting (Alternative 4)



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# NEPA SCOPING AND PROJECT PUBLIC ENGAGEMENT PLAN

Task/Meetings	Nov Scoping	Dec Scoping
Draft Public Meeting Agenda and Brainstorm Materials	Oct 7-13	Oct 7-13
Meet w/ Leadership and WV Staff to review Public Meeting Agenda and Logistics	Oct 9-13	Oct 16-20
<b>Leadership meetings (Governor's NRO, NMFS, BPA, ODFW, State Parks)</b>	Oct 23-27	Oct 23-27
Refine Public Meeting Agenda and Materials	Oct 16-30	Nov 6-28
Nov WFFDWG	Nov 7	Nov 7
Key Stakeholder Pre-Meetings (DEQ, Marion County, N. Santiam Watershed Council, City of Detroit, Detroit Federal Lakes Recreation Committee)	Oct 23-27	Nov 13-17
NOI published to Federal Registry	Oct 23	Nov 20
Finalize Public Meeting Agenda and print Materials	Oct 30-Nov 1	Nov 29-Dec 1
Intra-Agency NEPA SCOPING Public Meeting Dry Run	Oct 30-Nov 3	Nov 29-Dec 1
Inter-Agency NEPA SCOPING Public Meeting Dry Run	Nov 6-10	Dec 4-8
NEPA SCOPING Public Meetings (2) – open house style	Nov 13-17	Dec 14-20