

Pelton Reregulating Dam Fish Facilities Redesign

Nick Ackerman

July 23, 2026 – PRB Workshop





Overview of Existing Facilities



Project Goals

	Existing Facility	Improvements
Adult Trap Replacement	• Aging infrastructure with high maintenance needs • All fish must be anesthetized and handled • CO₂ anesthetic • Fish must be netted into trucks	• New facility designed to NMFS criteria • Reduces stress to fish with less crowding and options for visual (anesthetic free) sorting. • Batch electro-anesthesia water-to-water transfer into trucks • More personnel friendly (lighting, HVAC, ergonomics, etc.)



Pelton Trap construction - 1956



Project Goals

	Existing Facility	Improvements
New Round Butte Hatchery Chinook Rearing Facilities	• Round Butte Hatchery Chinook reared in Pelton ladder • Susceptible to landslides • Aging concrete • Water recycled from one cell to the next leads to poorer water quality for fish in lowermost cells	• Circular ponds will provide better water quality and rearing conditions • Easier personnel access and maintenance • Located at adult trap site



Project Goals

	Existing Facility	Improvements
New Stress Relief Ponds	One temporary pond currently in use	Three ponds with higher volume and longer hold time capable.



Current temporary stress relief pond



Project Timeline

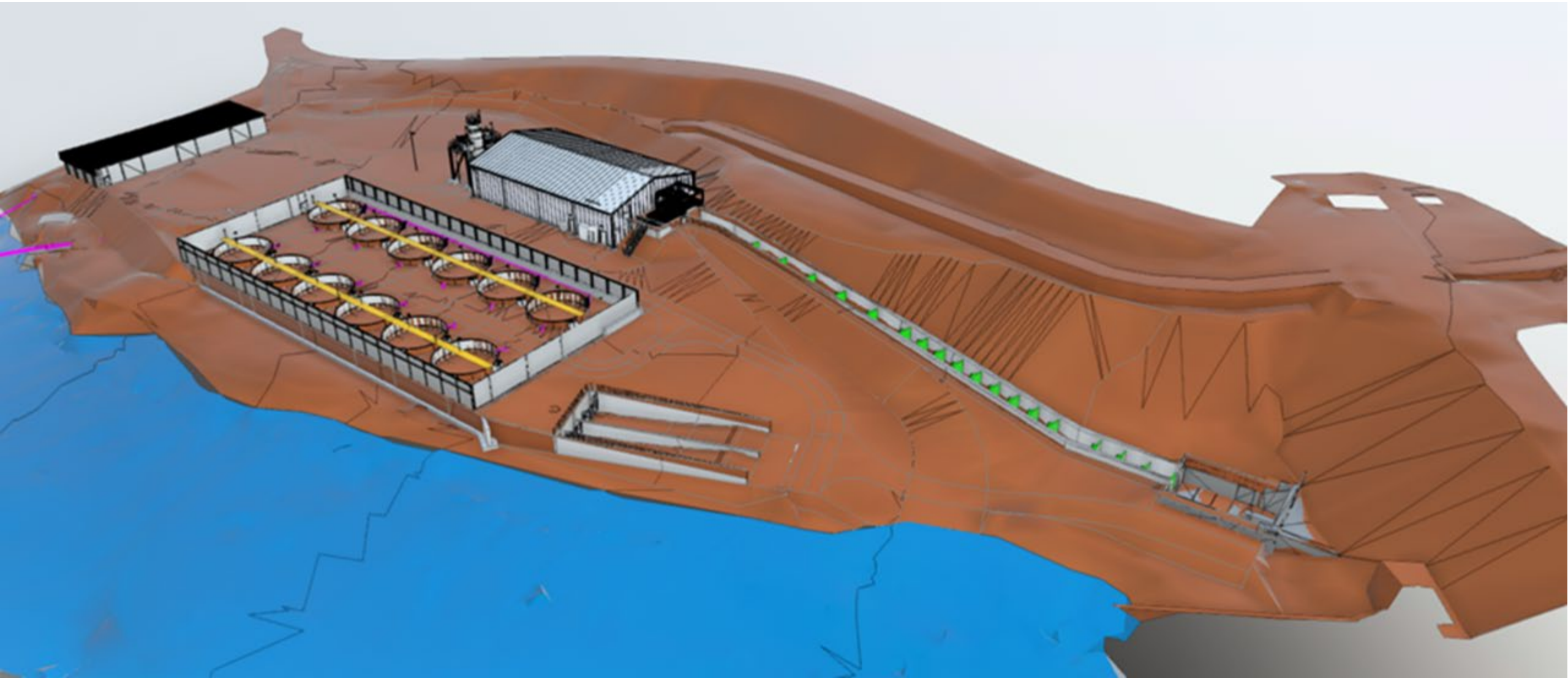


Currently at 90% design, moving toward issued for construction package.

Existing adult fish trap

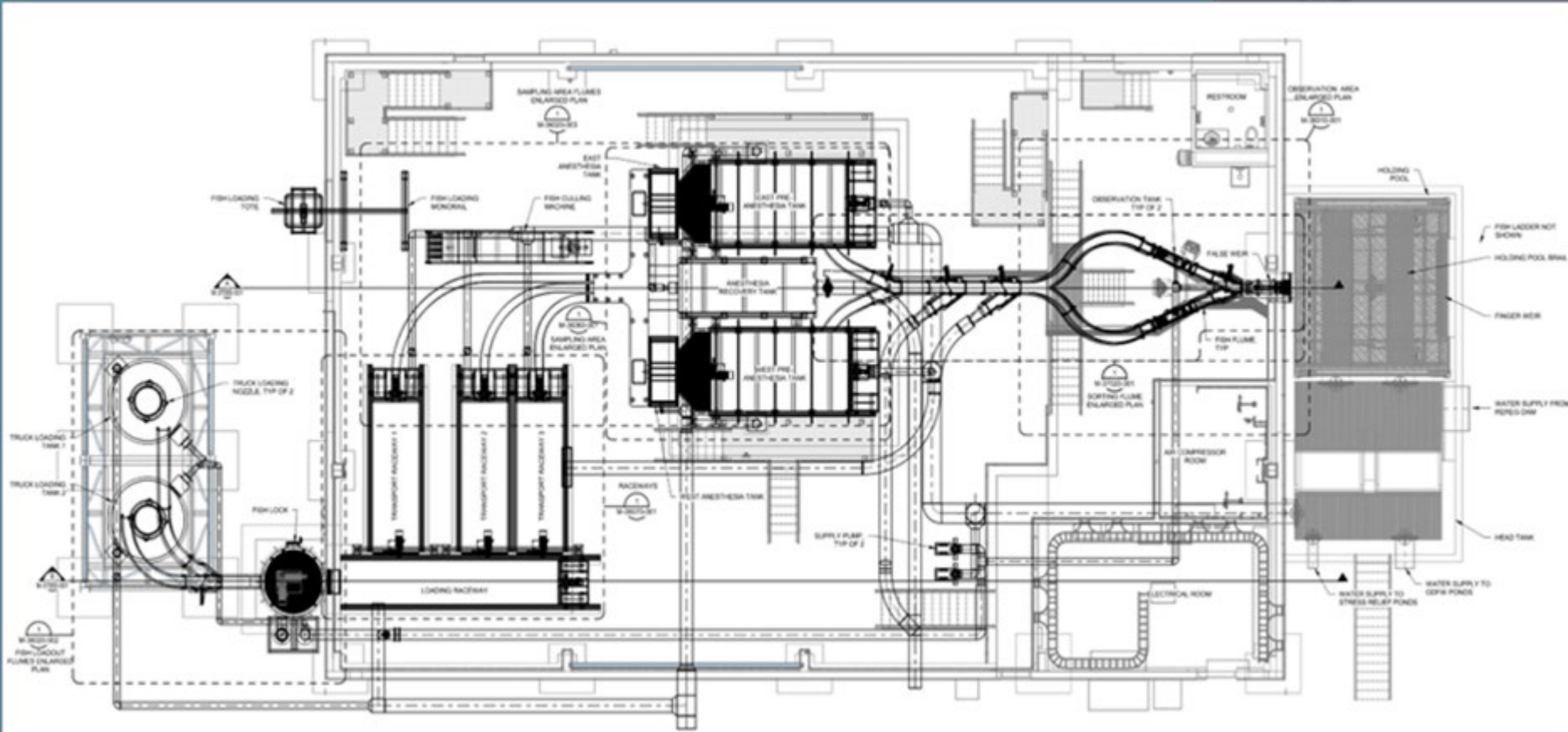


Overview of New Facilities



Adult Facility

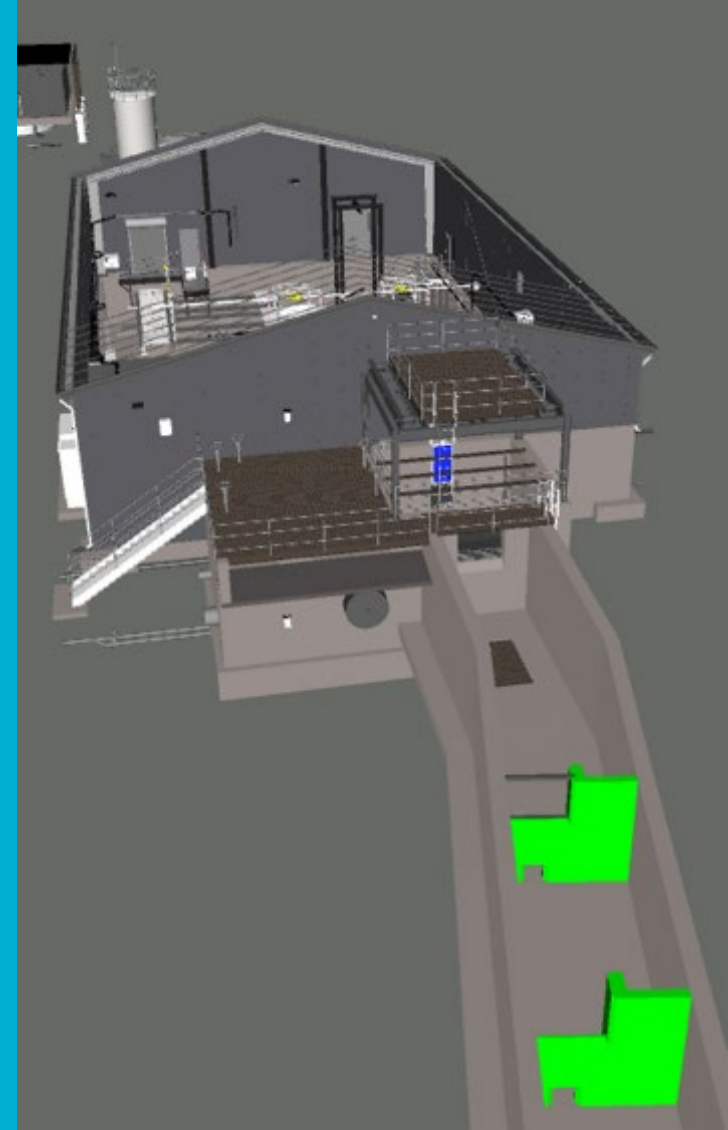
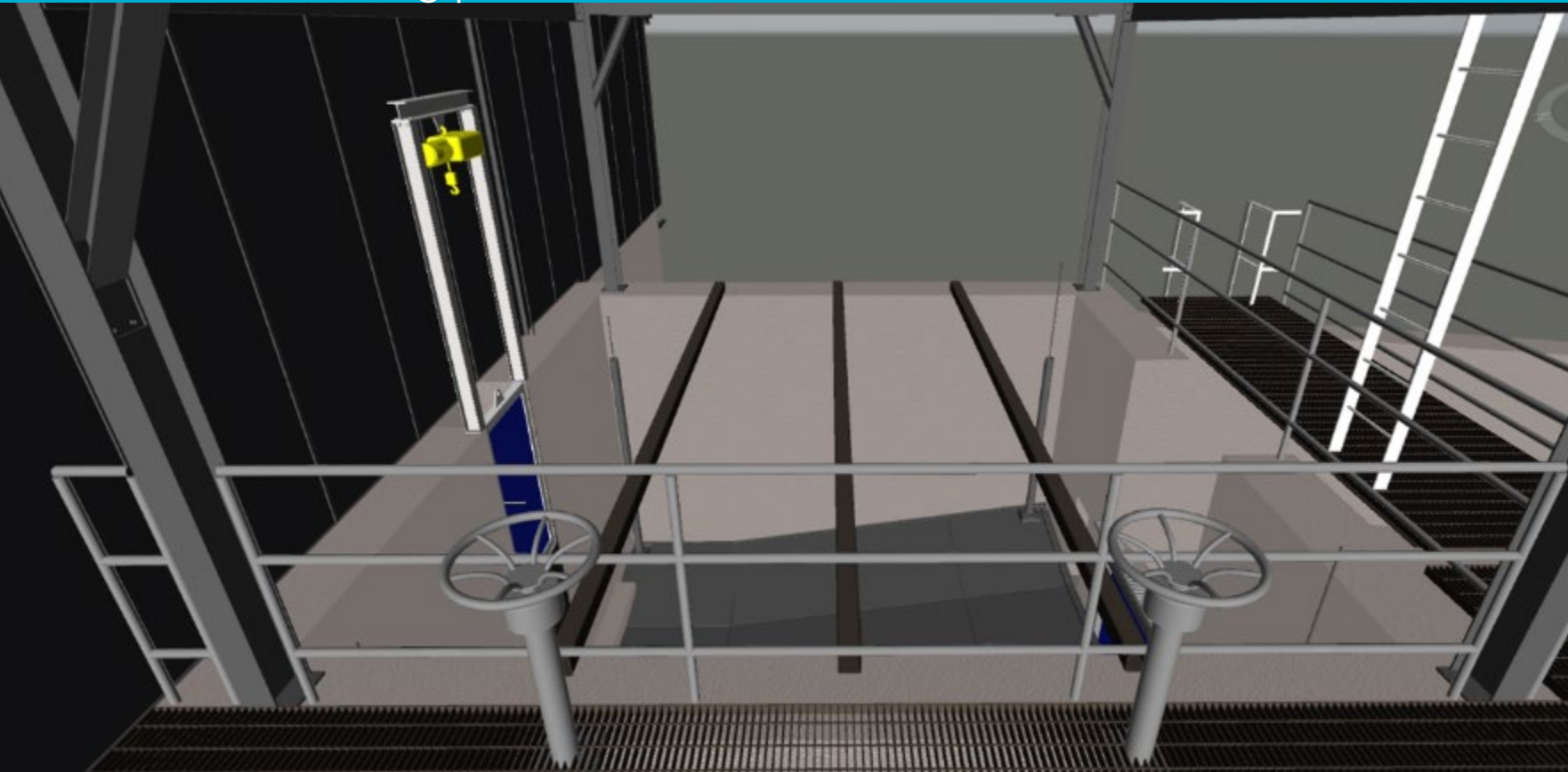
Overview, key elements, and fish routing



Ladder and Holding Pool

Overview, key elements, and fish routing

View into the holding pool



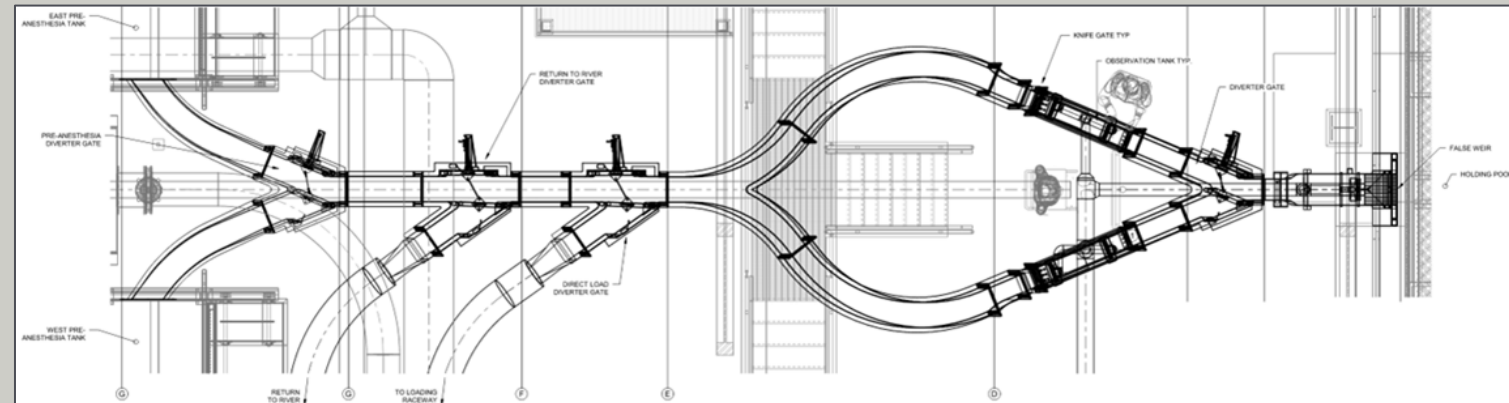
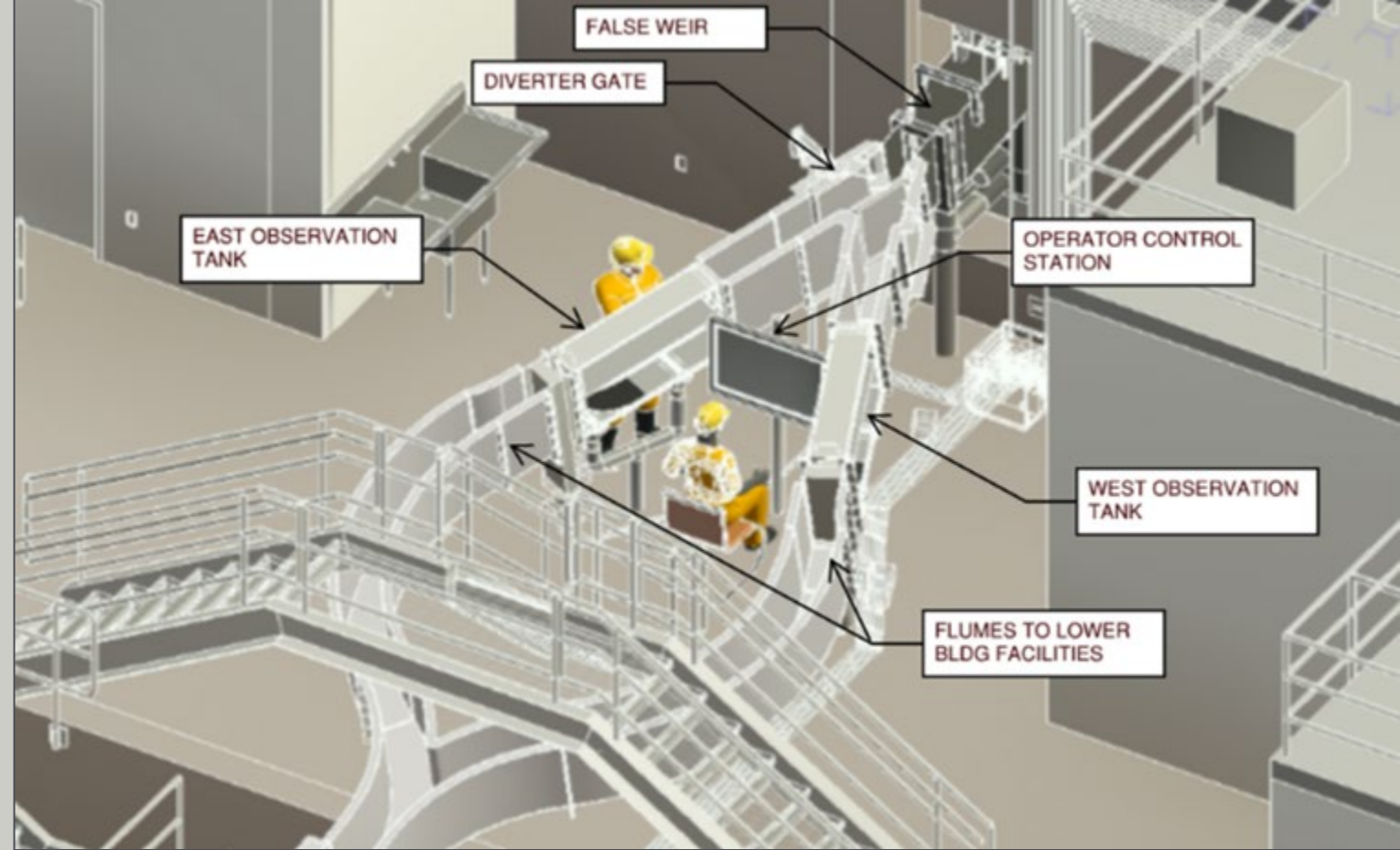
Ladder entering holding pool



Initial Sorting

Modeled after PGE's adult sorting facility on the Clackamas Hydro Project

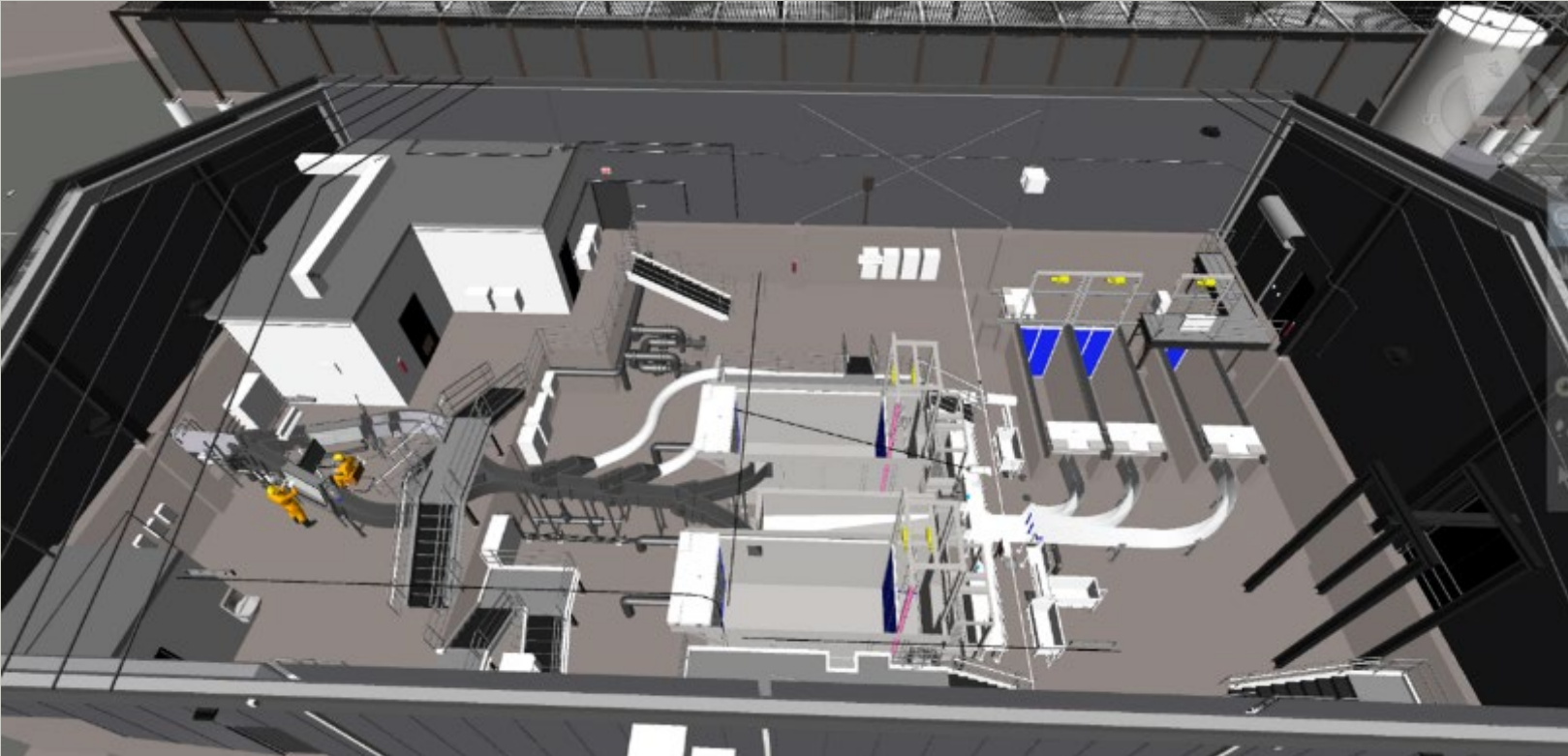
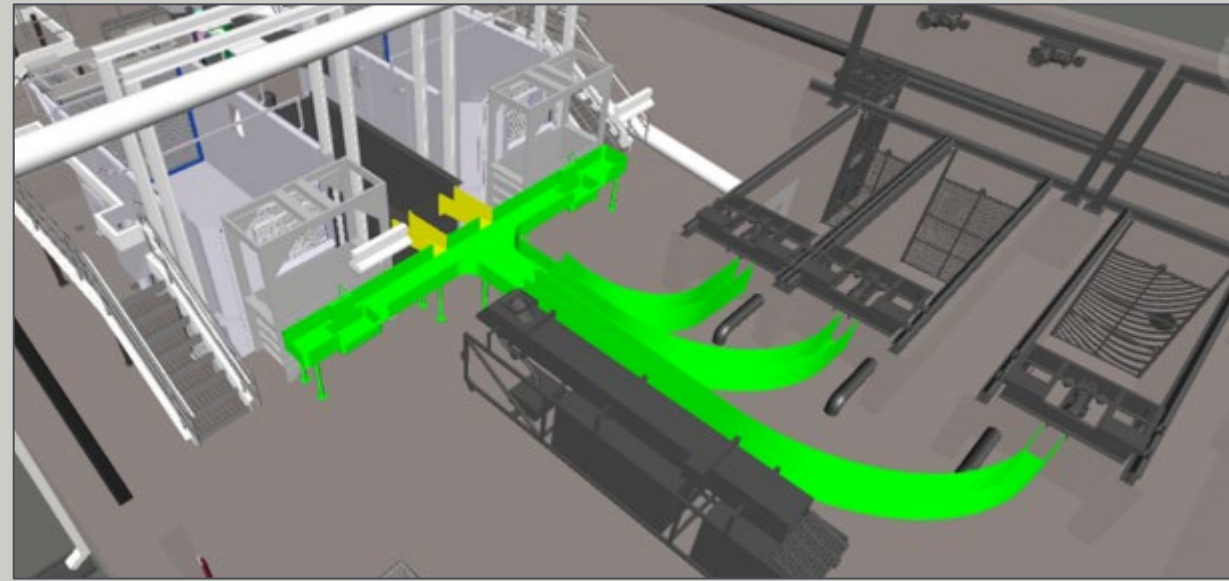
- Visual sorting based on species and mark status
- Completed by 1-2 people
- Sorting options:
 - Return-to-river
 - Truck loading tank
 - Two pre-anesthesia tanks



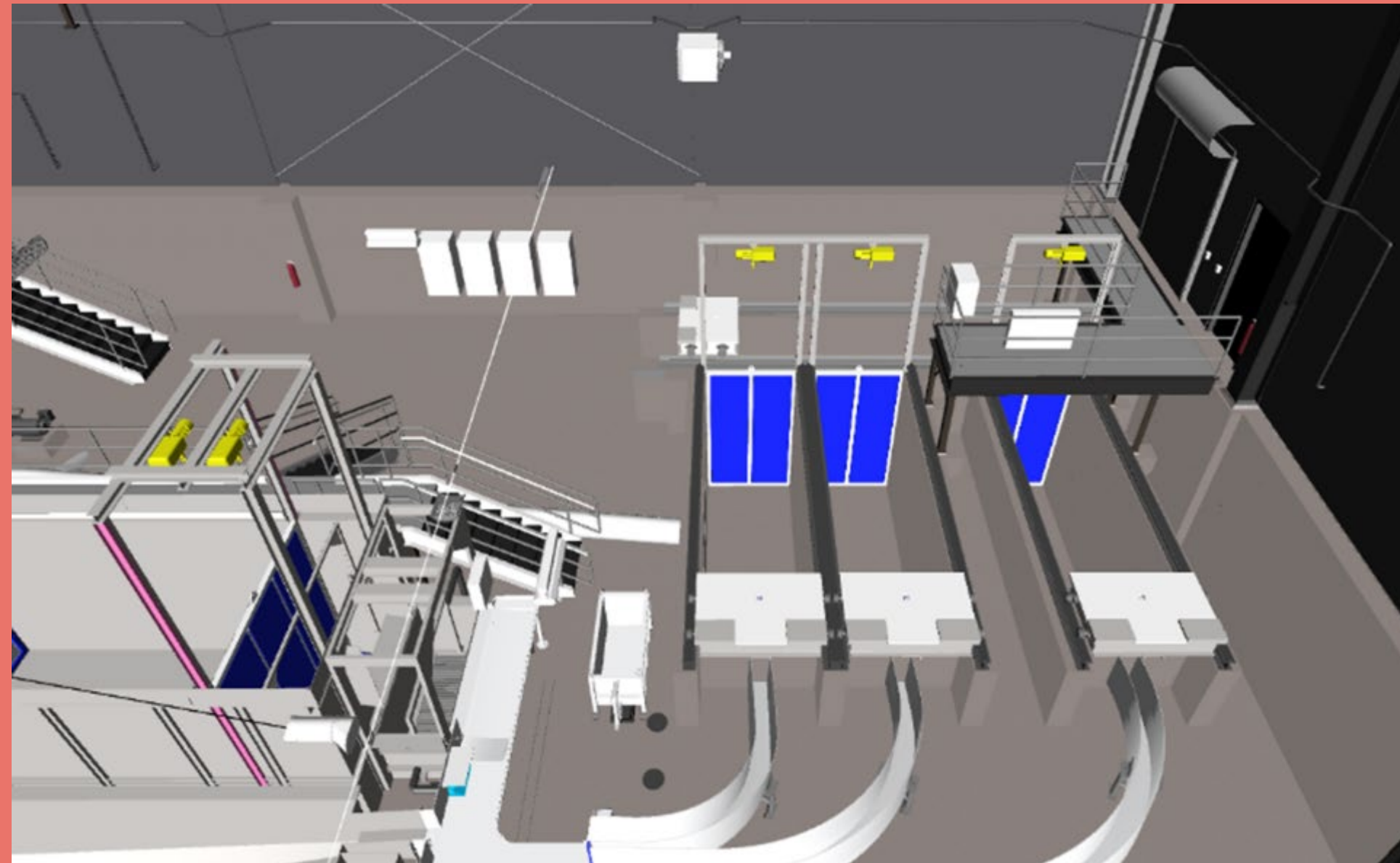


Secondary Sorting and Processing

Electro anesthesia allows handling, measurements, tagging, etc. Fish are routed to transport raceway.



Transport Raceways



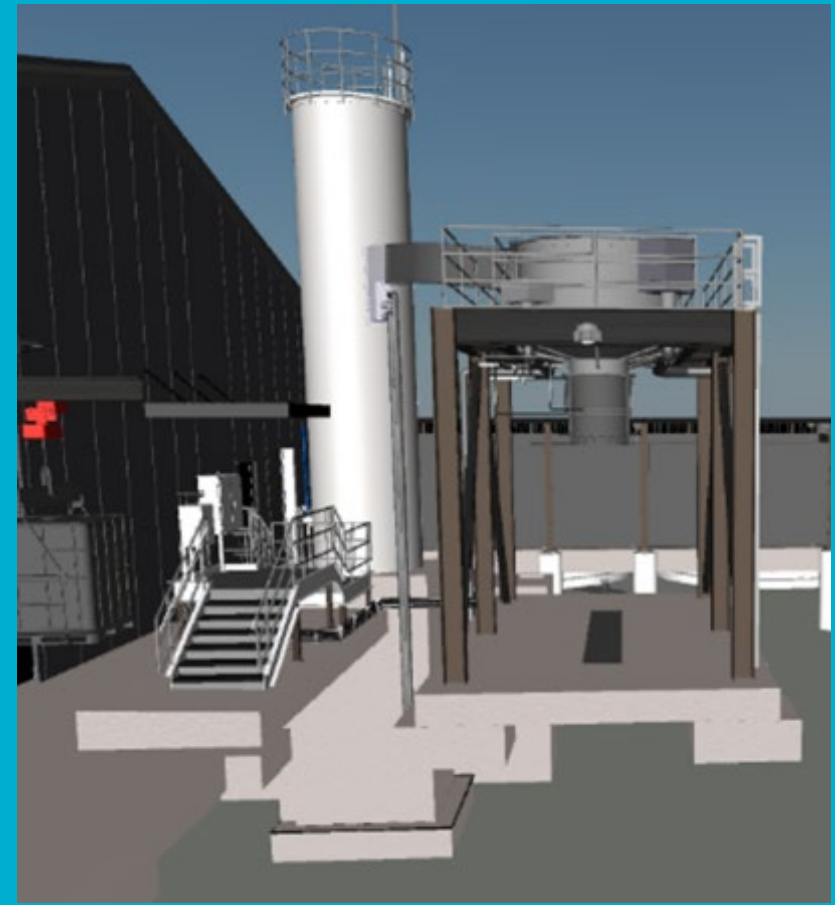
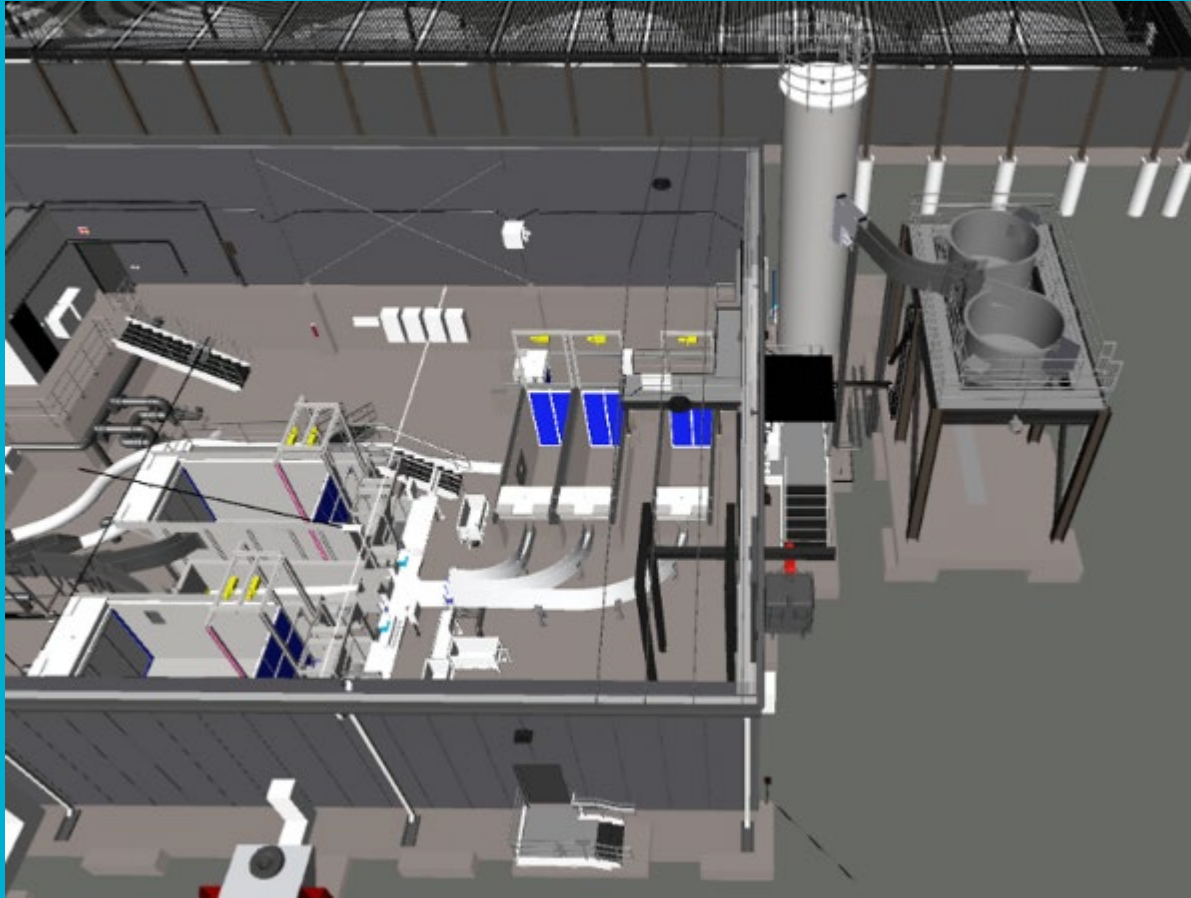
Three raceways to hold fish going to different destinations

- Each raceway is individually crowded into the loading raceway and fish lock



Fish Lock and Truck Loading

Fish are crowded from the loading raceway into the lock and then lifted for water-to-water transfer into the truck

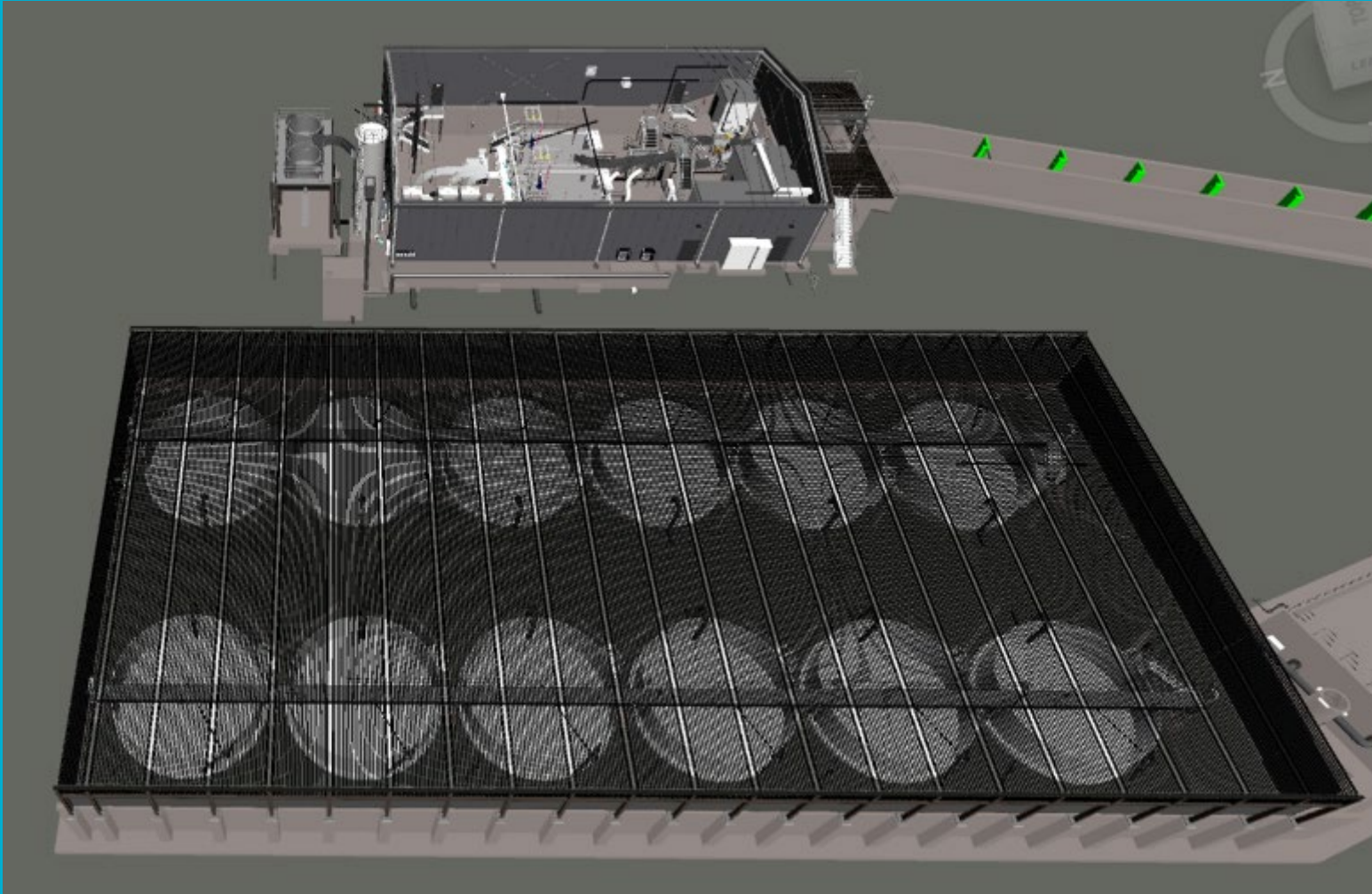


Truck loading area



Hatchery Rearing Ponds

12 Circular rearing ponds



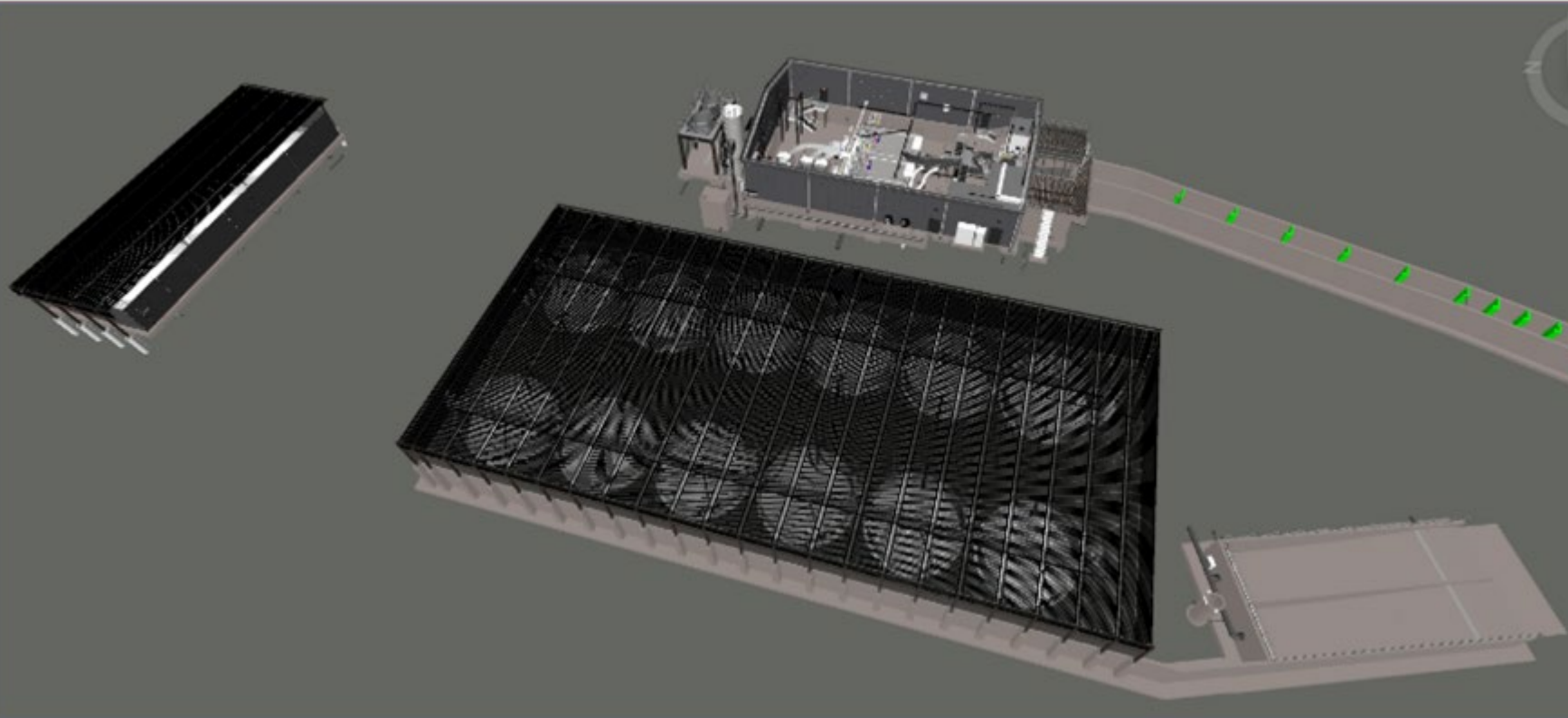
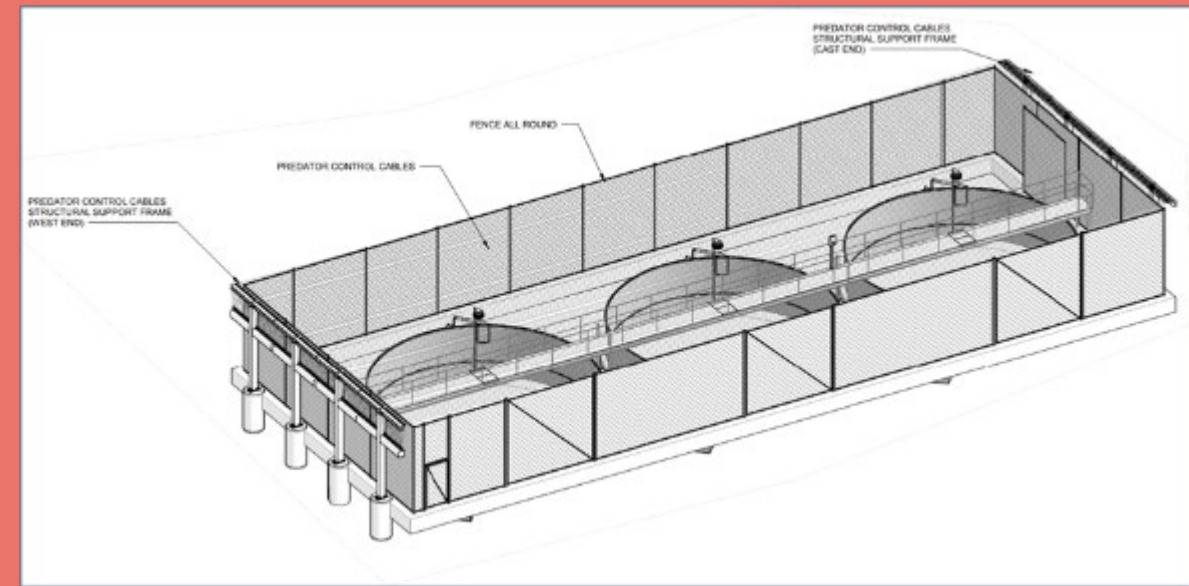
- Each 28' diameter and 6' deep
- In total will hold the program goal of 280,000 fish.
- Accommodate volitional and forced release into the river
- Enhanced predator exclusion
- Enhanced waste management and water quality through center drain and clarifier



Stress Relief Ponds

Also used for Hood River Program rearing (100K fish)

- Hold fish up to 72 hours
- Autonomous and programmable release
- Same tank design as rearing ponds



Questions

