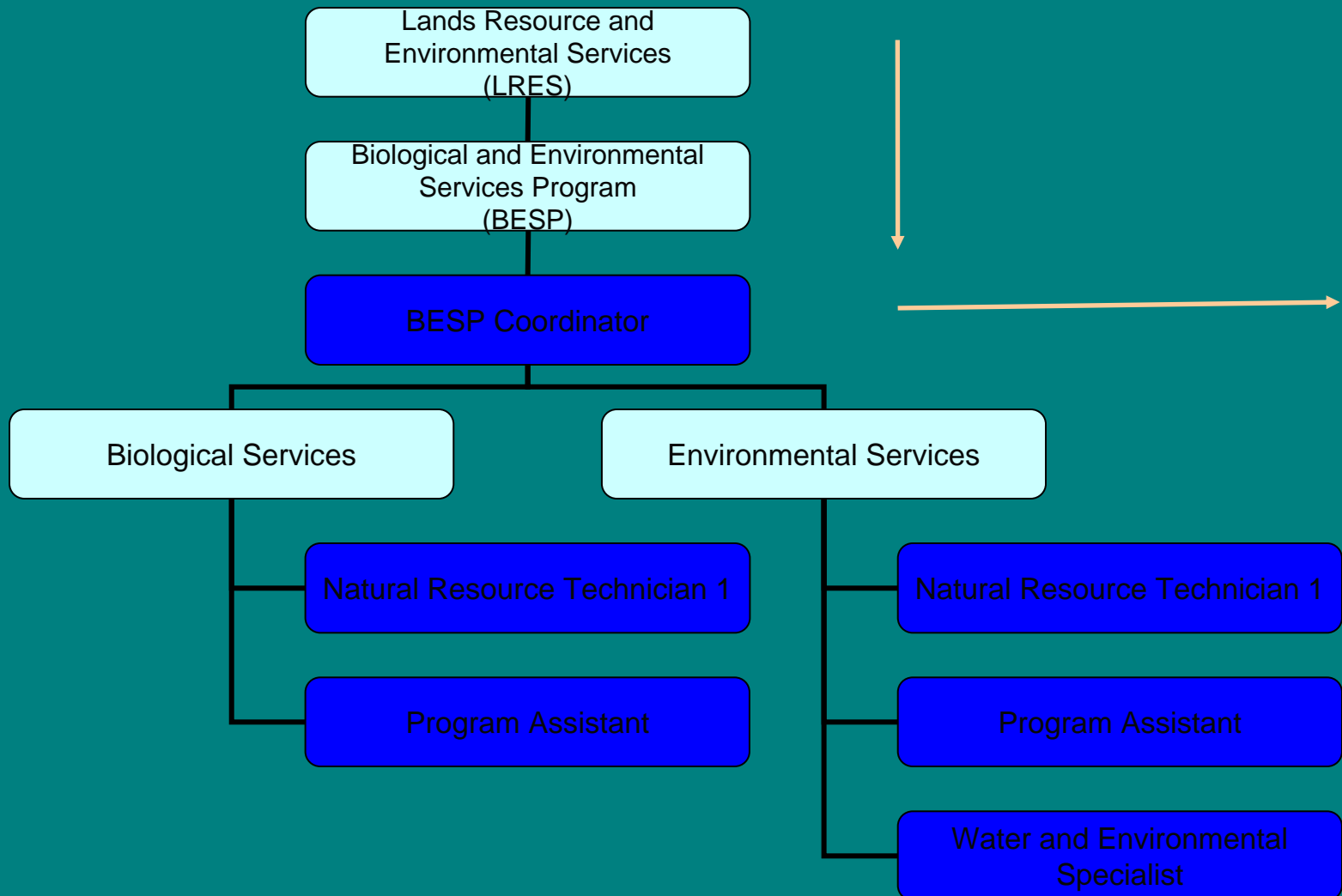


Coquille Indian Tribe Empire Reservation Fisheries Overview

“The Good, the Bad, and the Ugly”



CIT Water Quality/Fisheries Monitoring Program Structure



Coquille Reservation Eco-Zones



The Empire Reservation has four creek drainages, First Creek, Second Creek, Fourth Creek, & Tarheel Creek.

- The First Creek and Second Creek drainage areas are approximately 371 acres and 198 acres, respectively.
- The Tarheel and Fourth Creek drainage areas are approximately 400 and 470 acres, respectively.
- These four creeks flow northwest and cross under the Cape Arago Highway before flowing into Coos Bay. The Tribe currently monitors 8 full-time water quality sites on all 4 drainages.

Reservation Reservoir Resources

The Empire Reservation has two reservoirs totaling 32 acres

- Fourth Creek reservoir is 15 acres in size and holds 48 acre feet of water.
- Tarheel reservoir is 17 acres in size and holds approximately 147 acre feet of water.
- The Tribe currently monitors water quality at three locations in these reservoirs.

Historic Impacts to Fish



- Urban and Sivilcultural activities have greatly impacted streams/reservoirs from sediment loading, resulting in poor water quality and reduced habitat.

Stream Habitat Conditions

Creek	WQ limited	Substrate	LWD	RIP Cover
First	Temp.	Sand/Silt 91% Gravel 10%	Slightly above Undesirable	Undesirable
Second	Temp.	Sand/Silt 84% Gravel 16%	Undesirable	Desirable
Fourth	Temp.	Sand/Silt/ Organics	Undesirable	Undesirable
Tarheel	Temp. pH	Sand/Silt/ Organics	Undesirable	Undesirable

Fish Habitat Biological Assessments



- Biological Assessments drafted in 1997 and 2000 for the Tribe, found marginal habitat for coho and coastal cutthroat due to the paucity of proper spawning gravel.

Tribal Reservation Fish Presence

Same Biological Information Specialist (1997) and Fishman Environmental Services (2000) BA's found:

First & Second Creeks:

- coastal cutthroat (*oncorhynchus clarki clarki*), and as of 2008 lamprey ammocetes were observed by tribal staff.

Fourth Creek:

- coastal cutthroat, stickleback, yellow perch, bluegill, and lamprey ammocetes

Tarheel Creek:

- Cottids and sticklebacks, no cutthroat were observed

Factors that Potentially Limit Salmonid Production in Reservation Streams

Lack of in Water Structure	Fish Passage (1st & 2nd Creeks)
Inadequate Pool Depth	Water Quality (temperature)
Limited Spawning Habitat	Seasonal Low Flows
Low Forage Abundance	

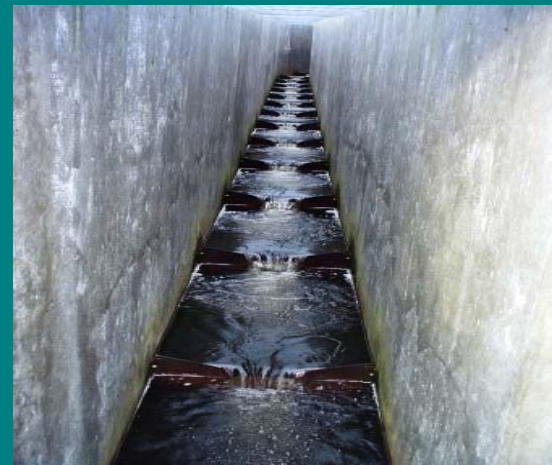
Reservation Fish Passage



- As recently as 2002 there was no fish passage to any of the Tribe's four creeks.

Fourth and Tarheel Fish Ladders

- Cooperation between CIT, BOR, and ODFW resulted in modern fish passage facilities at 4th and Tarheel Creek reservoir dams.



Tribal Watershed Improvement Efforts

Tribal management activities :

- Emphasized erosion control
- Closed/decommissioned roads
- Addressed Fish passage
- Vegetation management
- Improved Forest Practices
- Monitoring water quality

Fisheries Potential

- Presence of coastal cutthroat in First, Second, and Fourth Creek indicates that sufficient spawning substrate exists to maintain a self-sustaining population.
- Utilize the clay-stone gravel common to coastal Oregon sandstone substrate systems.
- Highest quality rearing habitat found in these basins are associated with pools created by beaver dams

Managing Towards the Future



- Providing adequate passage to historic habitat is one of the best ways to improve fish populations.
- No watershed recovery will be effective until riparian vegetation buffers are in place and road designs effectively halt sediment transport into the water-ways.

Coquille Indian Tribe Biological and Environmental Services Program

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