

# Hydro-Powered Recreation in the McKenzie River Valley



EWEB's **Carmen-Smith Hydroelectric Project** harnesses the weight of water to generate carbon-free electricity. The network of dams and reservoirs store water so EWEB can provide power when our community needs it most - offsetting the higher costs and CO<sup>2</sup> emissions of "peak energy." The project also creates opportunities for recreation and wildlife observation. **Choose an adventure to learn how hydro powers our community!**



## 1 Chase Waterfalls



**Park** at the Ice Cap Creek Day Use Area; **Hike** the Waterfalls Loop Trail to Koosah Falls and Sahalie Falls and back to Ice Cap Creek (2.5 miles).

### Insights:

- Volcanism creates waterfalls
- Volcanic springs naturally filter McKenzie River water

### Highlights:

- Koosah Falls
- Sahalie Falls
- Bright blue water, huckleberries, rainbows, mist

## 2 Behold the Beavers



**Park** at the Beaver Marsh at the Carmen Diversion Reservoir; **Observe** Beavers from the wildlife viewing platform.

### Insights:

- Beavers built a lodge on the marsh
- EWEB works with Forest Service biologists to monitor the population

### Highlights:

- Beaver lodge
- Beaver activity including gnawed sticks, trails through grass
- Biologist activity including plumbing to manage flow

## 3 Spot Salmon



**Park** at the Tamolitch Falls Trailhead; **Hike** the McKenzie River Trail to Tamolitch Falls (Blue Pool) and back (4.1 miles).

### Insights:

- This is the farthest upstream that salmon can access on the McKenzie
- EWEB installed habitat upgrades to support fish populations

### Highlights:

- Golfball-to-softball-sized rocks in the water that salmon use to make their nests called "redds"
- Downed tree trunks and tree tops placed to create cover, forage and habitat complexity

## 5 Explore the Engineering



**Park** at the Trail Bridge Day Use Area; **Bike** to the Trail Bridge Dam and Trail Bridge Power Plant to marvel at infrastructure that helps power Eugene.

### Insights:

- Dams create reservoirs
- Reservoirs act like huge batteries, storing water as potential energy for when it's needed
- Water falls 500 feet from the Smith Reservoir to the Carmen Power Plant
- The water turns turbines, creating electricity through electromagnetism

### Highlights:

- Observe reservoir levels changing
- Look for Dam features such as debris boom and spillway

## 4 Encounter Eagles



**Park** at Smith Reservoir Boat Ramp; **Paddle** Smith Reservoir and scan the shore for signs of avian habitat.

### Insights:

- Eagle nests are most likely to be found on large Douglas fir trees
- EWEB surveys for eagle nests at Smith Reservoir

### Highlights:

- Eagle nests
- Osprey - watch them dive into the water to catch fish
- Snags, which serve as critical habitat for many species



# Species of Interest

A wide variety of birds, mammals, fish and plants make their homes in and around the Carmen Smith Hydroelectric Project. Look out for these species of interest as you recreate in the area.

## Raptors



Bald Eagle



Osprey

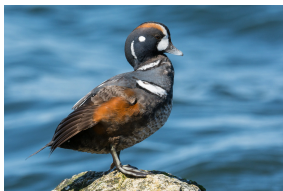


Peregrine Falcon

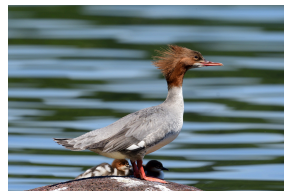


Red-tailed Hawk

## Waterfowl



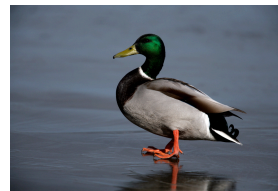
Harlequin Duck



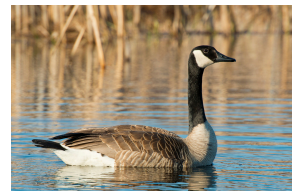
Common Merganser



Barrow's Goldeneye



Mallard Duck



Canada Goose

## Common Birds



Spotted Sandpiper



Belted Kingfisher



American Dipper



White Crowned Sparrow



Dark-Eyed Junco

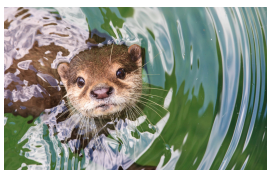


American Robin



Violet-Green Swallow

## Mammals



River Otter



Beaver

## Protecting Flora & Fauna

EWEB protects wildlife by investing in habitat enhancements, observing species presence and abundance, and altering construction and operations to accommodate sensitive species and important natural cycles such as nesting and spawning.

Projects supporting wildlife include:

- Improving the Spawning Channel below Trail Bridge Dam to facilitate Chinook salmon and bull trout reproduction
- Snag creation for wildlife habitat
- Manual vegetation management below Transmission lines encouraging native plant communities and enhanced wildlife habitat and abundant Native Plants for Cultural Use.
- Placing gravels, logs, and tree top bundles to improve salmon and bull trout spawning and rearing habitat



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## Mammals



Pika



Bobcat



Cougar



Elk

## Fish



Chinook Salmon



Bull Trout



Rainbow trout



Brook lamprey

## Common Plants



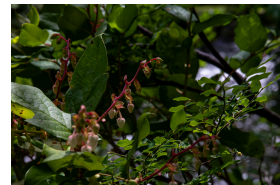
Western Columbine



Red-flowering Currant



Maidenhair fern



Salal



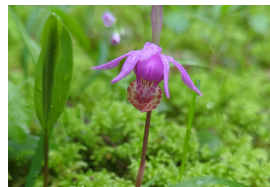
Fawn lily



Red huckleberry



Western Rhododendron



Fairy Slipper



Western Trillium



Tiger lily



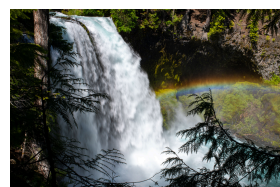
Menzies' larkspur



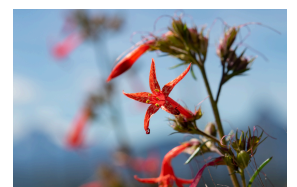
Oregon iris



Shooting star



Western red cedar



Scarlet gilia