









1 Bald Hill Field

Dunawi Creek begins on the the north east and south sides of Bald Hill. The City plans to reconnect the upper and lower portions of the North Fork through the field at Bald Hill's base.

2 Shopping Center

An early example of stormwater remediation during development from the 1990s. Asphalt and shopping center roof tops prevent rain water from infiltrating soil before entering the waterway.

LEGEND

- | | | |
|---|--|---|
|  Dunawi Creek Watershed |  Tour Stop |  Wetlands |
|  Park or Fairground |  Trolley Route |  Bike Route |
|  Present-day Dunawi Creek |  Historic Dunawi Creek Channels | |

DUNAWI CREEK BRANCHES OF LIFE Urban Stream Tour 2016

Tree of Life, which fills with its dead and broken branches the crust of the earth, and covers the surface with its ever-branching and beautiful ramifications.

-Charles Darwin

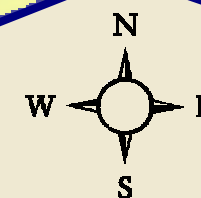
4 Confluence

The area where Dunawi Creek enters the Marys River has very steep banks, and represents one of many barriers to fish passage.

3 Sunset Park

The Dunawi watershed still has significant wetland acreage. Sunset Park is a restored wetland where ducks, beavers, and other wildlife find shelter and raise their young.

5474 ft



Dunawi Creek Branches of Life Tour

Before 1850, many headwater streams originating from low elevation hills, such as Bald Hill and Country Club Hill contributed to Dunawi Creek which was one of the Kalapuya Indian tribe’s main travel routes between summer and winter camping areas, and a source of staple foods such as camas lilies. This relatively flat creek retains many acres of important wetlands, including the County’s wetland mitigation by the fairgrounds and the City’s restored wetland at Sunset Park. Wetlands support life in so many ways; they offer flood protection, water purification, and critical habitat for birds, fish, and wildlife. We may lose some of these wetlands as development continues.

The Dunawi Creek watershed contains over 2,300 acres—just over one fourth of the total acreage of Corvallis. Dunawi Creek drains southwestern Corvallis from Bald Hill to the Marys River. The north and south forks of Dunawi Creek converge between Research Way and 35th Street, and the confluence with the Marys River is about one mile east of Ashbrook. Today the largest land use along Dunawi is residential, but interesting features, including restored wetlands and riparian restorations, are found along its recreational and commercial reaches. Our tour will introduce you to the many branches of life supported by Dunawi Creek.



1. BALD HILL FIELD

Midge Cramer Trail, SW Corner of Benton County Fairgrounds Parking Lot off Reservoir Rd.

Trolley: 1:00 PM Cyclists: 1:30 PM

Close to the headwaters of Dunawi Creek’s North Fork, this location represents the intersection of recreation, development, and agricultural impacts on an urban stream. The initial upstream lowlands of this creek has been tilled, sprayed, planted with commercial grass seed and harvested every year right over the stream. The City is working in partnership with Corvallis Sustainability Coalition’s Water Action Team to stop these practices on City land and to reconnect the upper and lower portions of the creek.

Closer to the fairgrounds parking lot, a road realignment project has altered the shape of the waterway and efforts, such as a fish-friendly culvert, have been made to improve ecological integrity. Depending on weather conditions at the time of your visit, you may be able to see water actively draining from the fields west of the fairgrounds right into the creek.

Presenters: Anne Stewart, David Zahler, Ralph Alig and John Gabriel

2. SHOPPING CENTER

South entrance of shopping center off Technology Loop Road, east of BiMart, near All Family Vision Care

Trolley: 1:40 PM Cyclists: 2:15 PM

This South Fork Dunawi Creek site was developed in the late 1990’s when Corvallis land development codes were just beginning to protect stream corridors. The site development required a buffer of 50 feet on both sides of the creek for the stream corridor. Large areas of impervious pavement and rooftops throughout the shopping center prevent rainwater from soaking into the ground where pollutants would be naturally filtered.

If this site were to be developed today, current land development and wetland protection codes would require water detention and water quality facilities to treat and slow stormwater runoff into the stream corridors. The area would be wet longer and promote wetland functions. Wider buffers and wetland protection would preserve more of the area in a natural state. Expanded floodplain in natural areas help protect downstream areas from rapid stormwater runoff. Wider buffers also provide more space for wildlife habitat and native vegetation.

Presenters: Grant Livingston and Bruce Moser

3. SUNSET PARK

Sunset Park parking lot located off 45th Street on north side of Country Club Drive

Trolley: 2:20 PM Cyclists: 2:55 PM

The Sunset Park wetland helps protect the surrounding communities from flooding. These wetlands are designed to improve water quality by collecting the adjacent ball field’s nutrient-rich runoff instead of allowing the runoff to enter the stream directly where it could cause algal blooms and low oxygen conditions. The boardwalk encourages visitors to keep their shoes/paws dry and the ecosystem undamaged. The stream and wetlands have a thriving beaver population and a host of native wetland plants, many of which are used in Kalapuya basket making.

ODFW sampled Dunawi Creek fish populations in Sunset Park in 2012 and 2013. They found native Oregon chub, three-spined stickleback, redbreast shiners, and sculpin. The biomass of the site was dominated by western mosquitofish, a nonnative invasive species. Nonnative predatory bluegill were present as well.

Presenter: Brian Bangs, ODFW

4. CONFLUENCE

Meet at parking area SW of Brooklane Dr. and Philomath Blvd intersection, then cross over Brooklane on foot.

Trolley: 2:55 PM Cyclists: 3:35 PM

The last stop on the tour is at the confluence of Dunawi Creek and the Marys River. The water may seem much more energetic at this stop than at previous stops, partly because of the increase in flow as small tributaries and groundwater enter the creek, and partly because of the steeper elevation change at this location. The channel is deeply incised, or downcut into the valley floor, allowing the creek little opportunity to interact with its floodplain.

Channel simplification upstream concentrates winter stormwater runoff into a single channel, increasing stream power and causing incision. In the summer, Dunawi Creek likely contributes warm water and fecal coliform (bacteria) to the Marys. Therefore, our stewardship of Dunawi Creek is not only important for maintaining a habitat for aquatic organisms, but also for the well-being of all the people living in Corvallis and in the communities located downstream.

Presenter: Jon Pywell

recreation and agriculture

stormwater runoff

wetlands

fish passage barriers