#### Stop 4: SUNSET PARK

**Viewing Location:** Sunset Park parking lot at 45<sup>th</sup> Street and Country Club Drive



A restored wetland is attractive to native wildlife such as ducks and beavers.

This restored wetland on the South Fork of Dunawi Creek provides additional space for water to flow during the wet season and helps protect the surrounding communities from flooding. The stream and wetlands have

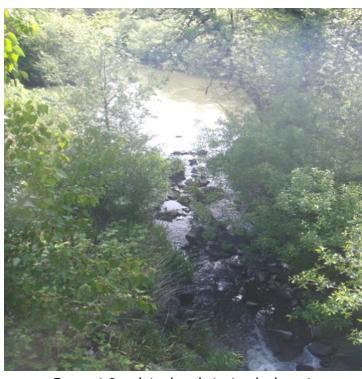
a thriving beaver population and a host of native wetland plants. The planting design for the wetland was created by Alta Planning and included vegetation used in Kalapuya basket making. Basket making is an important part of Kalapuya tribal culture and many native wetland and riparian plants are used for materials. Another noteworthy feature is the recycled plastic boardwalk, which encourages human visitors and their pets to keep their shoes/paws dry and the ecosystem undamaged while they explore the wetlands. These wetlands are designed to improve water quality by collecting nutrient-rich runoff from the adjacent ball field. By flowing first into the wetland, this runoff can be used by wetland plants instead of entering the stream directly where it could cause algal blooms and low oxygen conditions.

#### Stop 5: BROOKLANE CONFLUENCE

**Viewing Location:** Brooklane Drive off of Hwy 20

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. Dunawi Creek's mouth is affected by both upstream and downstream

processes. 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. These are water quality parameters of concern for the Marys and Willamette Rivers. 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.



Dunawi Creek is deeply incised where it meets the Marys River

### **Invasive Species Resources**

BSWCD's invasive plant database bentonswcd.org/plant\_cat/invasive/

BSWCD's Aquatic Weed Guide bentonswcd.org/water-weed-guide/

### Points of Interest Not Visited on the Tour

- A) Low Impact Development Demonstration Project at Starker Arts Park near the SAGE Community Garden. This site is a working demonstration of a green roof, rainwater catchment, and rain garden combination that can help reduce and clean the flow of stormwater while also conserving treated municipal drinking water used for irrigation.
- B) Duck Pond at Starker Arts Park. This water feature provides enjoyment to many, but park goers should NEVER FEED THE DUCKS. Too many ducks in the pond contribute excessive levels of bacteria and nutrients to Dunawi Creek, which leads to water pollution.
- C) Ashbrook Independent School Camas Field
  For three years, Ashbrook teacher Jill Sisson's
  "Conservation Crew" has planted camas bulbs on
  Ashbrook's side of the bike path. They've also
  worked to remove English ivy and have educated
  their community by labeling storm drains with 'Dump
  No Waste, Drains to River' for Earth Day 2010.

### **Healthy Water Tip**

### Protect Riparian Buffers

**Restrict** mowing and allow native vegetation to grow freely in a 10-foot strip along streambanks to reduce erosion and to help filter out pollutants.

Report stormwater pollution by calling the City of Corvallis Stormwater Pollution Prevention Hotline. 541-766-6565

# Learn More and Get Involved with Local Waterways

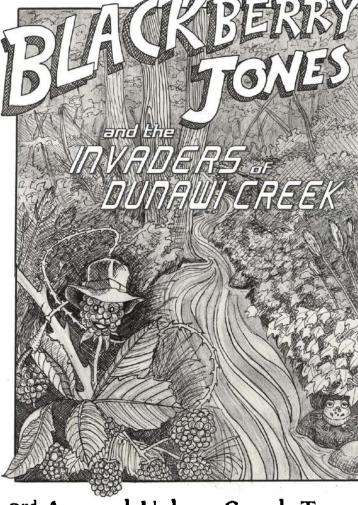
Benton County Environmental Programs www.co.benton.or.us/eiac/page/environmentalresources

Benton Soil and Water Conservation District - www.bentonswcd.org

City of Corvallis Stormwater Program - www.ci.corvallis.or.us/stormwater.program or 541-766-6916

Corvallis Sustainability Coalition
Natural Features & Water Action Groups www.sustainablecorvallis.org

Marys River Watershed Council - www.mrwc.org



## 3<sup>rd</sup> Annual Urban Creek Tour Corvallis, Oregon

### **Explore Dunawi Creek!**

Discover wild places in the city, urban influences on the creek and how to keep the creek beautiful and healthy!

This tour sponsored by:





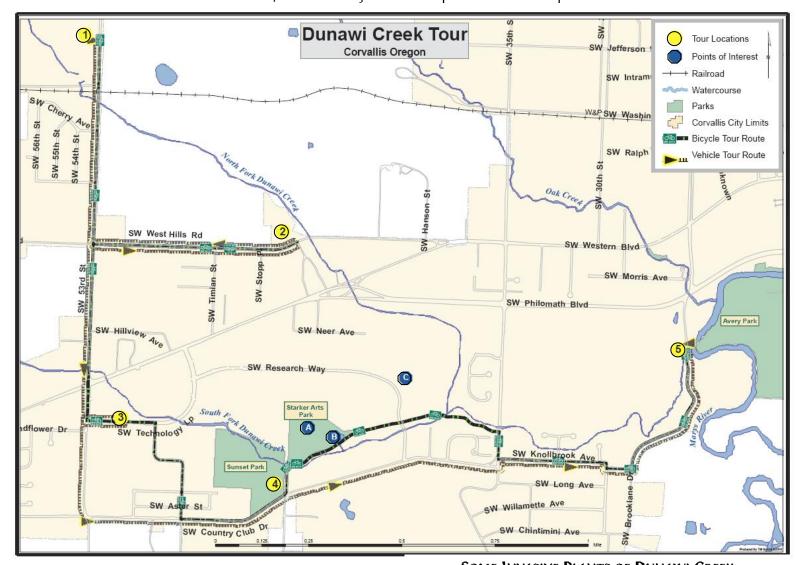


Created May, 2010; modified 2021 & 2013 for the Self Guided Tour and electronic edition.

### Introduction to Dunawi Creek

Previously known as Squaw Creek, the creek was renamed Dunawi, which means wise woman, around the year 2000 as part of a nationwide effort to remove the derogatory term "squaw" from place names. Dunawi Creek is one of four distinct drainage basins in the city of Corvallis. Its watershed contains over 2,300 acres, which is just over 25% 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 near Ashbrook Independent School, and the confluence with the Marys River is located about one mile east of the school. One notable feature of this creek is its low-elevation headwaters. With its highest elevation of 460 feet at the North Fork's headwaters, the creek only

drops about 260 feet by the time it reaches its mouth. The South Fork is even flatter with a total elevation change of only 150 feet. In the past, Dunawi Creek 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. Today the largest land use along Dunawi is residential, but some of the more interesting features, including restored wetlands and riparian restorations, are found along its recreational and commercial reaches. These features will be highlighted during the tour. Keep your eyes open for native and invasive species as you proceed. Not all sites host the same invaders. Can you guess why different sites are more or less susceptible to different species?



### WHAT MAKES AN INVASIVE SPECIES INVASIVE?

The most important aspect of an invasive species is how it responds to a new environment. An invasive plant is one that spreads and establishes over large areas, and persists

Invasiveness may be characterized and enhanced by:

- robust vegetative growth
- high reproductive rate
- abundant seed production
- high seed germination rate
- longevity

www.nps.gov/plants/alien/

### Some Invasive Plants of Dunawi Creek Armenian Blackberry Herb Robert



native food

sources for

wildlife

displaces



movement of

large animals



decreases biodiversity in forest understories

increases erosion along streamban ks

### Stop 1: BALD HILL

<u>^</u>

Viewing Location: Midge Cramer Trail, at the Benton County Fairgrounds South Parking Lot



Newly constructed stream bed and fish-friendly culvert

At this stop you are close to the headwaters of the Dunawi Creek's North Fork. Headwaters are important because they influence conditions downstream. This unique location represents the confluence of recreation, development, and agricultural impacts on an urban stream. A road realignment project has altered the shape of the waterway and efforts, such as the 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.

### Stop 2: FIRST CONGREGATIONAL UNITED CHURCH OF CHRIST (FCUCC)

Viewing Location: FCUCC, off of West Hills Rd. in Hanson Grove (east of main parking lot)

This North Fork Dunawi Creek site is home to active Stream Stewards. The Caring for Creation Committee of FCUCC has hosted education events and sought grants



A young Stream Steward plants natives in Hanson Grove.

to engage their faith community in caring for their backyard stream. This group has worked hard to remove invasive Armenian blackberry and English ivy and to plant natives, such as white alder and red flowering current, which will help improve stream ecosystem function.

#### Stop 3: 53rd STREET SHOPPING CENTER

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



Intact streambanks help filter runoff from the parking lot.

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 have required several features. All impervious surfaces 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 have preserved 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.

### \*Beneficial Wetland Functions

- Habitat for wildlife
- Floodwater storage
- Erosion control
- Water purification
- Economic benefits
- Recreation
- Education
- Aesthetic appea

