GOOD DRAINAGE, GOOD VIBES

revitalizing, reprogramming, and revealing stormwater at South Eugene High School

"Good Drainage, Good Vibes" demonstrates a regionally relevant green infrastructure site redesign that combines the benefits of stormwater treatment, climate mitigation, active transportation planning, and ecological education, catering to current user experience with an eye towards informing resilient urban watershed management.

Despite South Eugene High School’s proximity to Amazon Creek, a major local waterway, this connection is currently invisible to students and community users of the nearby bike path. The front entry to the school is flanked by large, flat expanses of lawn which become waterlogged in the wet Oregon winters and go largely underutilized by students. The water flowing off these lawns, parking lots, and rooftops, is piped unfiltered into the degraded and channelized creek, to eventually flow into the Long Tom and finally Willamette Rivers.

"Good Drainage, Good Vibes" envisions a school campus that manages stormwater on-site and makes the flow of stormwater demonstrable and legible to the community, revealing the invisible, reprogramming the underutilized, and revitalizing the degraded.

South Eugene High School site plan

Who is Learning?
- SEHS Students
- University of Oregon Students and Faculty
- City Designers and Maintenance Staff

What can be Learned?
- Water Temperature
- Rate of Flow
- Drainage-Basin
- Pervious Plant Species
- Sediment Buildup
- Plant and Animal Diversity
- Plan and Growth Condition
- Ecology Information

Who is measured?
- On-Site Sensor
- On-Site Demo
- Wkly Survey
- Photo Monitoring
- Wkly Monitoring

Where on Campus?
- Parking lot planters and rain gardens
- Bike path and education boardwalk
- SEHS building
- New permeable parking lot

New potential benefits
- New permeable parking lot
- New tree benefits
- Winter energy savings
- Waterfall enhancement

On-site monitoring and interpretive signage provide educational opportunities to students and the public.

New paths and seating provide access and gathering spaces in the previously underutilized front lawns.

New trees pay for themselves in under 25 years through stormwater management, carbon sequestration, and energy savings.

On-storm management of impervious surface reduces monthly stormwater fees (15,000 sf).

The addition of over 30,000 new ground cover plants and shrubs creates food and habitat for pollinators, birds, and amphibians.

Over 90% of new plant species installed are native to Eugene, improving biodiversity.

Nature is a multi-functional landscape with social, economic, and environmental benefits.