

GPHAC

Stream and Natural area constraints and considerations

Natural Areas are important in Public Spaces

- Parks and natural areas have independent influences on physical and mental health.
- Parks help provide physical activity and social opportunities which help mediate mental health benefits.
- Natural areas increase physical activity but also provide a unique health benefit through autonomic nervous system regulation.
- We have a unique opportunity to provide a high quality park AND natural area that can be used by many in the community.
- The more seamless the transition areas are between the traditional park elements and the natural area the more inviting both areas will be leading to more use and benefits to all that spend time there.

Survey results

Opportunities

- Natural Play area
- Passive Recreation: Birdwatching, photography
- Trails for walking, running, biking, and skating
- Trees and shade
- Tributary stream access, enhancement
- Conservation Education
- Creation of a distinctive community image that preserve the unique characteristics of a community

Natural Play Areas



Research indicates that, when children play and learn in nature, they do so with more vigor, engagement, imagination, and cooperation than in wholly artificial environments, and that symptoms of attention deficit and depression are reduced. Experts agree that children need access to nature the same way they need good nutrition and adequate sleep.

<https://www.nwf.org/Home/Kids-and-Family/Connecting-Kids-and-Nature/Nature-Play-Spaces>

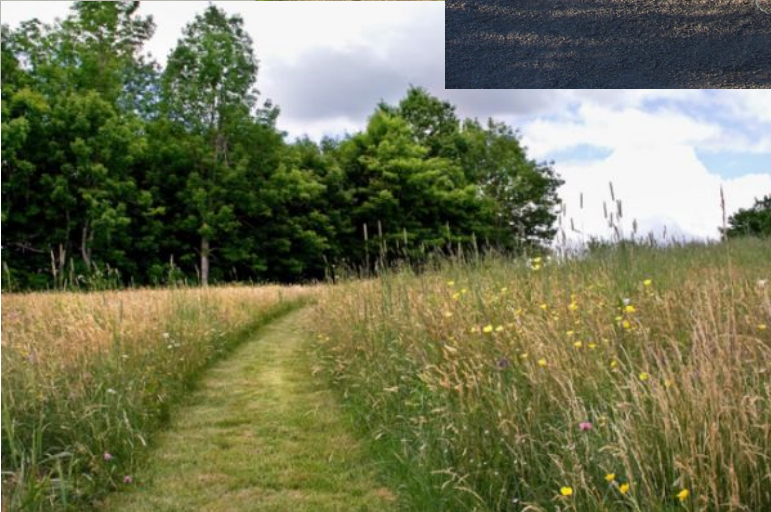
Westmoreland Park, Portland



Trails, Water Access, Education



<https://fernhillnts.org/>



Constraints and considerations

- Enhancing natural features is more efficient and less expensive than mitigating negative impacts
- Development and construction within floodplains, wetlands and stream areas requires additional permits and oversight from many agencies.
 - Department of State Lands – wetlands and waterways
 - Oregon Department of Fish and Wildlife – fish bearing streams, fish passage
 - US Army Corps of Engineers – wetlands and waterways
 - City of Scappoose – Riparian and Sensitive Lands
 - Department of Environmental Quality – stormwater and erosion control during construction, Water Quality certification

DSL and ACOE Wetlands and Waterways

**A well planned project will result in easier and faster permitting process.

1. Identify Regulated Waters on Project site – includes rivers, wetlands, regulated intermittent stream, channelized streams, ditches, extend to the Ordinary High Water Mark
2. Consultant can identify boundaries, assess function and value and develop mitigation plans.
3. Explore alternatives to avoid or minimize impacts - Applications for removal fill permits require demonstration that the activity is the practicable alternative with the least impact to wetlands or waterways. To do this, applicants must have a clear purpose and need, a set of project criteria and explore alternative project locations alternative site layouts and alternative construction methods to avoid and minimize impacts to meet the project objectives.
4. Plan to mitigate for Unavoidable Impacts – Propose mitigation to replace the functions and values lost as a result of the project.
5. <https://www.oregon.gov/dsl/WW/Pages/Permits.aspx>

Department of Fish And Wildlife

- South Scappoose Stream is a fish bearing stream with ESA listed species including Chinook salmon and Steelhead.
 - *The tributary may or may not be fish bearing, ODFW would need to determine
- Any activity or construction below the OHW line needs to occur during in-stream work period – July 1-Aug 31
- If tributary is determined to be fish habitat, any crossing needs to meet fish passage standards. Generally bridges or open bottom culverts are allowable with footings outside the active channel area.
- <https://www.dfw.state.or.us/fish/passage/>

City of Scappoose Sensitive Lands- Wetlands and Fish and Riparian Corridor

- https://www.ci.scappoose.or.us/sites/default/files/fileattachments/municipalcode/293/17.85_sensitive_lands_-_wetlands.pdf
- https://www.ci.scappoose.or.us/sites/default/files/fileattachments/municipalcode/296/17.89_sensitive_lands_-_fish_and_riparian_corridor_overlay.pdf
- 50 ft from top of bank

“The permanent alteration of the riparian corridor by grading or by the placement of structures or impervious surfaces is prohibited.” there are exceptions for roads, streets and trails

“Removal of native vegetation is prohibited” with exceptions for maintenance of existing structures and vegetation, etc.



Streams and Wetlands in adjacent parks





Stream

Wetland?

Stream

Long-term Maintenance and Costs

- Costs for plant installation, as well as many stream enhancements, could be covered by grants and/or partner funding
- All park amenities will require long-term maintenance by public works staff, volunteers, and/or contractors
- “Cost data shows that the combined cost of installation and maintenance for natural landscape over a ten year period may be one fifth of the costs for conventional landscape maintenance...due to significantly reduced or eliminated labor, water, fertilizer, and mowing. The reduced consumption of fossil fuels for lawn maintenance equipment is an additional benefit.” —Greenacres: A source Book on Natural Landscaping for Public Officials, EPA 2016.

<https://archive.epa.gov/greenacres/web/html/chap2.html>