



River-related Projects and Policies Balancing Development and Restoration

Introduction

This paper summarizes a sample of plans and projects that attempt to balance waterfront industrial development or other industrial development with river enhancement opportunities or natural resource preservation, and looks at the status of these developments.

In many cases, waterfront development and waterfront restoration have been thought as mutually exclusive, with one occurring at the expense of the other. Often waterfront restoration projects occur along banks that had previously been the site of docks, piers or areas of bank and channel manipulation. As older harbor lands lost their economic value for industrial development, they have often been turned into parks and natural areas. Examples of this are evident in the parks and open space areas along many rivers and shorelines from Tacoma to Washington DC. Locally, Tom McCall Waterfront Park was originally the center of Portland's shipping industry.

There is less evidence of attempts to coordinate shoreline enhancements within working waterfronts. However, there are some instances of balancing these uses along the waterfront. In addition, there have been plans, both in Portland and elsewhere where industrial development and natural resource preservation have co-existed. While these plans may not be directly related to marine terminal development, they may contain ideas that could be used in West Hayden Island.

This report reviews some of these projects to help generate potential ideas that could be applied to West Hayden Island. The report is formatted into three sections; Past Plans that have occurred, Project Related plans, and Current or Future Plans.

Past Plans

Portland Greenway Plan

Portland has taken several steps over the past 20 years, first through the creation of the Willamette Greenway Plan, and also in subsequent attempts to address river quality in area plans such as South Waterfront and St. Johns. The Portland Greenway Plan, established to conform with State Goal #15 – Willamette River Greenway, created a Greenway Overlay Zone to apply to areas adjacent to the Willamette River within the city limits. It established certain use restrictions, setback and landscaping requirements for development, and additional review processes for specific types of development. The Greenway Overlay Zone is not strictly an environmental zone but attempts to balance the vitality of the harbor while providing opportunities for improving the natural and recreational qualities along the bank.

The Greenway Overlay zones have resulted in establishing bank enhancement areas and recreational trails along the Willamette River. In addition, waterfront development projects have included setbacks and bank landscaping. The quality of these areas has varied and they can often be isolated from other bank enhancement projects. Other plans such as the South Waterfront Plan have implemented some of their own regulations, while remaining consistent with the Greenway Plan. For South Waterfront, additional landscaping requirements, plant lists and trail provisions have been included.

These current plans have often had their critics. Industries located along the river stated they had difficulty working within the discretionary nature of the Greenway Review process and felt that there was a lack of consistency in the application of criteria. Environmental interests have felt that the requirements have not gone far enough in enhancing, or even maintaining the natural and scenic qualities of the riverfront. The desire to have public access along the river has often conflicted with public ports and private industry needs for security along their portions of the working harbor, resulting in a disjointed system of river trails. These are the concerns currently being worked on through the River Planning Process described below.

Environmental Zones

Over the past 20 years, Portland has also applied environmental zones to areas of environmental sensitivity, that are identified as providing benefits to the public. The intent of these zones is to focus development away from environmental resources to the extent possible. While these zones do not preclude development, they do encourage development that is sensitive to, and protects the resources.

There are two environmental zones, environmental conservation (c) and environmental protection (p). Of the two zones, the environmental protection zone provides the highest level of protection to the most important resources and functional values. The 'p' zone restricts most development within its designation.

The environmental zones have been successfully applied to resource areas on a citywide basis. However, in certain areas with specific resources, this tool has been modified to better fit the area. This is illustrated by the special regulations in the Columbia South Shore and Pleasant Valley plan districts. The River Plan is also creating new zones.

West Eugene Wetlands Plan

The West Eugene Wetlands Plan was begun in the late 1980's after it was discovered that 1,300 acres of (redefined) wetlands were found in an area that was originally zoned for industrial development between central Eugene and Fern Ridge Reservoir to the west. This was an area where the city had already invested in public infrastructure for existing and future industrial uses. The city, environmental groups, other regulatory agencies, and concerned citizens crafted a plan to preserve high quality wetlands in compliance with federal and state law, protect rare species, provide opportunities for recreation while ensuring predictability to the development community for development of the remaining lands. The plan was adopted in 1992. Wetlands within the study area were identified for protection, restoration, or development. Wetlands slated for development tended to be small, isolated features that may have already been partially compromised by existing development. The prime method to protect the wetlands was an acquisition program. In conjunction with this program, a mitigation banking system was set up for developers to buy credits from restored wetlands to allow for development on the wetlands designated for development.

Other goals of this plan were to better manage stormwater, address water quality, improve flood control, enhance plant and animal habitats, and provide opportunities for recreation, education and research. The city worked with federal agencies to achieve oversight for the wetland program.

A literature search of this plan has indicated substantial success in preserving wetlands and providing educational opportunities to the public. Since the plan was adopted, 3,000 acres have been acquired and protected in a connected system which aids in habitat enhancement and connectivity, and flood management. Federal funding has provided much of the financing for this program. 800 acres of wetlands have been enhanced or restored. Several trails have been built as well as an interpretive center that hosts year-round environmental educational

programs. What is not apparent from this search is whether the program has also removed barriers to development for the industrial sites and/or been successful in implementing more clear and objective standards for sites. It is also not clear how much new industrial square footage has been built since this plan went into effect.

Projects

Rivergate Industrial Development

Since its creation the Port of Portland has developed more than 5,000 acres of marine, aviation and industrial lands in the Portland metro region. One of the larger parcels the Port has developed is portions of the 4000+ acre Rivergate area in North Portland. Rivergate consisted of low lying floodplain, small lakes, sloughs and open lands between the Columbia and Willamette Rivers. Land preparation activities in the Rivergate industrial area began in the early 1940s and have continued for over 50 years. Early development activity, in the 1960s resulted in land sales to Ash Grove cement and the precursor to Evraz Oregon Steel (Gilmore Steel Corporation) along the banks of the Willamette. The Pittock-Leadbetter estate made up the majority of Rivergate. After being donated to Willamette University in 1950 2,000 acres of the land was purchased by the Port in 1965. In combination with prior purchases along the Willamette the holdings in Rivergate would eventually see the development of 2,000 acres of marine, general industrial and warehouse development.

Rivergate lands include over 2000 acres of natural resource areas that front along the Willamette and Columbia Rivers and Columbia Slough. The natural areas incorporate off-channel habitat along the northern portion of the Columbia Slough and include Smith and Bybee Lakes, owned by the Port and Metro and managed by Metro. Smith and Bybee Lakes make up one of the nation's largest urban freshwater wetlands. In essence hidden within the Rivergate industrial area, the lakes function as flood absorption for the lower Columbia and provide habitat for a diverse community of flora and fauna. Natural and open space areas within Rivergate also include the 104 acre Kelley Point Park located at the confluence of the Willamette and Columbia rivers. The parks, open space and natural areas in Rivergate are the result of earlier planning process agreements as well as land development and mitigation requirements.

Investment in economic, recreation and natural resource land use has continued over five decades. New warehouses have gone up in recent years on some of the last large parcels of industrial land within the city. Investments in off-channel habitat enhancement along and near the mouth of the Columbia Slough have resulted in increasing salmon use. New small-boat ramp facilities at Smith and Bybee Lakes and at Kelley Point Park have opened up these parks to greater recreation use. The mix of habitat, open space and industrial/employment lands in Rivergate illustrates how economic, natural resource and recreation development can occur in a way that balances multiple goals and objectives.

Evergreen Road Annexation and Concept Plan Project – Hillsboro, OR

The City of Hillsboro completed a concept plan in 2008 in preparation of annexing a 534 acre parcel of land in unincorporated Washington County adjacent to Evergreen Road, near the Hillsboro Airport. The site is south of Highway 26 and west of NW Shute Road and was brought into the Urban Growth Boundary in 2005. Natural resource features in the area and on-site include Waible Creek, a tributary of McKay Creek and other drainage features that flow to McKay Creek. Current land use is agricultural and rural residential with some industrial (Genentech) and unique (Hillsboro Airport) uses close by. The site features a high-voltage BPA transmission line that runs in an east-west direction through the north central portion of the

site. The Hillsboro Airport's runway protection zone extends into the southwest corner of the site.

The concept and development plan were developed to fulfill an agreement between the City of Hillsboro, Metro and Washington County to plan for future employment growth. The plan identifies economic opportunities, addresses industrial sanctuary issues and identifies adequate supporting infrastructure. As part of the project natural resource features and environmental constraints were inventoried. Planning for protection and enhancement of natural resources was undertaken as part of the concept plan and would be included with zoning designation at the time of annexation. Mitigation for impacts to the Waible Creek Tributary, wetlands, floodplain and riparian upland wildlife resources will be required at the time of development, based upon city, state and federal regulations. The plan strives to protect connectivity of resource types to allow for wildlife passage between larger habitat units. Mitigation, enhancement and restoration will be undertaken with this goal as a guiding principle.

Port of Charleston, South Carolina

The Port of Charleston has recently undergone expansion of their facilities, which created direct environmental impacts on land and aquatic resources. To address these impacts, the Port has developed an Environmental Stewardship Policy, which includes provisions to protect and enhance land resources and aquatic life. As part of this program, they have partnered with several public agencies to aide in mitigation efforts related to their port development.

For example, as part of the mitigation efforts required by development of a new terminal, the



Port has contributed money to restore 22 acres of tidal marsh at the southern tip of Drum Island, located in the harbor directly across from a terminal facility. For this project, dredge spoils and vegetation will be removed, the site flushed and replanted as a functioning marsh ecosystem. In addition, mitigation bank credits are being purchased to offset the development impacts of 2.4 acres of wetlands at the terminal site. Other land preservation purchases include providing funding to allow the

Trust for Public Land to purchase 126 acre Morris Island to allow the Trust to pursue preservation efforts of a historic site. As part of the ports aquatic mitigation, they have contributed money to restore and enhance 5 acres of oyster reefs in and around Charleston Harbor.

Existing Port of Seattle Efforts

Although Seattle is still working to refine their shoreline regulations, the Port of Seattle has several examples where they have incorporated open space, recreational and public access needs with terminal facilities. The Port of Seattle maintains approximately 1,500 acres of land which includes marine terminals, marinas, parks, and shoreline public access areas. This includes preserving over 47 acres of fish and wildlife habitat along the lower Duwamish River (where several terminals still operate) and in Elliot Bay. The Port has also created 20 public shoreline access points, many of them directly adjacent to working terminals. Several terminals have done habitat mitigation at the site as part of Washington's Shoreline Management Plan. The parks are owned and maintained by the Port.

A specific example of balancing several uses on site occurs at Terminal 86 along the north part of Elliot Bay. Terminal 86 is an automatic grain terminal with a deep draft berth. However, the shoreline also is part of Elliot Bay Park with 4,100 linear feet of shoreline with a pathway and public access. The pathway actually runs underneath the grain conveyor between the shipping berth and the grain elevator. There is a fishing pier at the north end. A 2.5 acre

artificial reef was also installed just beyond the fishing pier as part of an aquatic mitigation project. To the north Elliot Park continues between Terminal 86 and Terminal 91 which is a general cargo terminal. (See photo attached)



Seattle's Terminal 86, with bike/public access along shoreline connecting to park at left of photo. In water mitigation occurred to the left of the photo.

Current and Future Plans

Portland River Plan

As it has been reported, the attempts by the River Plan to address the balance of industry and nature have become controversial. The plan, focused within the working waterfront of the north reach, has tried to balance environmental enhancement requirements with providing certainty to land owners along the river. However, the regulations requiring a city review in addition to mitigation bank payments, and some minimum landscaping requirements have been deemed excessive by many waterfront industries. Although the plan has been approved by City Council, additional work on the details still needs to be finished, and the current approval is being appealed to the State Land Use Board of Appeals..

However, the intent of the plan is innovative, in that it attempts to create a funding mechanism so that certain lands within the harbor could be mitigated to provide bank restoration,

landscaping and areas for fish habitat. These areas would be incorporated within the larger context of the Portland Harbor. These areas have traditionally been kept geographically separate, but progress is being made to incorporate restoration within the working harbor. Seattle is also attempting a similar off-site mitigation system with the update of their Shoreline Master Program.

Other Regional Efforts – WA Shoreline Management Plan and Seattle’s update

Washington has had a Shoreline Management Plan in place since 1972. The plan’s original goal was to coordinate shoreline planning throughout the state. It’s intent was to encourage water dependent uses, protect existing natural resources and promote public access. Cities and counties were expected to develop shoreline master programs in conformance with this act. In 2003, the Department of Ecology updated the Shoreline Master Program guidelines.

Similar to the Willamette Greenway guidelines, the Shoreline Management Plan both encourages water dependent uses such as ports while attempting to provide mitigation for impacts on natural resources. Under the current guidelines, piers and docks can be constructed by port authorities when they have completed a needs analysis or master plan. Generally, new facilities are required to provide mitigation on site. With their update, Seattle is proposing an alternative mitigation plan where some industries will have the option to provide mitigation to development impacts off-site. This is similar to provisions proposed in the current River Plan. The hope is that this will allow restoration and enhancement efforts to be combined into larger and more effective mitigation efforts. However, it has not been implemented yet.

Conclusion

While several projects and plans have used or proposed mitigation banking as a way to focus restoration opportunities in some areas and development in others, these have often applied to larger areas with a larger number of owners and stakeholders than West Hayden Island. If West Hayden Island is developed in the future, it will likely be done by a single owner (The Port of Portland) with the purpose of providing marine terminals. So, the balancing may have to occur all on port-owned property. The Port of Seattle may be the closest example of combining these uses on a site. However, their focus has appeared to be more on public access and recreation rather than restoration of the shoreline. In addition, most of the projects at Seattle have occurred in areas that were previously concentrated with marine industrial uses, while West Hayden Island’s previous and current uses have been mostly the disposal of fill, farming activities, and utility corridors.

The Port of Charleston has undergone recent expansions of their terminal facilities, and in conjunction with these expansions, they have committed to restore areas adjacent to the terminals or within the harbor. These have been done to mitigate the development impacts, and include both funding the purchase of lands by Public Agencies as well as contributing funds for restoration projects. This type of mechanism would be available on portions of West Hayden Island that aren’t developed or other areas in the harbor. However, much of this work is often negotiated at the time of development, not necessarily incorporated into preliminary planning.