Headwaters at Tryon Creek

The Headwaters at Tryon Creek serves as a demonstration in sustainable stormwater management, green development practices, wildlife habitat restoration and water conservation. The development includes LEED Silver rated senior housing, town homes and market-rate apartments along with numerous environmental site enhancements which are highlighted by the first daylighted creek in the City, running the length of the 2.8 acre (1.1 hectare) property. This newly developed community is now a part of the growing ecology of its site.

- Variety of Housing
  - Senior, Affordable Row Houses, and Market Rate Apartments
- Building Construction – Complete in 2006
- Wetland Enhancement – Complete in 2006
  - enhancement of upstream wetland adjacent to project
- Rain Garden – Complete in 2008
  - manages 1.5 acre (0.6 hectare) of commercial parking lot and street runoff

Special features of the site include:

The daylighted tributary stream of Tryon Creek:

- originally ran through a pipe under the site
- is approximately 450 linear feet (135 meters)
- connects an upstream, forested wetland to a downstream rain garden
- is planted with native trees, shrubs, and grasses that restore lost riparian and wetland habitat
- has a 5 foot (1.5 meter) deep gravel lens below the stream bed that helps direct flow below the surface for groundwater recharge.

The Rain Garden:

- covers 0.5-acres (0.2-hectares)
- sits on the site of a former traffic triangle and a 200 foot (61 meter) section of street
- allows the long-buried stream to connect with Tryon Creek
- treats storm water from adjacent development and right-of-way, helping to filter pollutants as well as reducing the rate and magnitude of stormwater flows.

Remaining elements of the site continue to celebrate water while endeavoring to mimic natural processes. These include:

- **green street infiltration planters** that artfully display the conveyance of stormwater, collecting onsite stormwater as well as stormwater from the public right of way.
- **flow-through planters** adjacent to the building capture roof runoff, and individual downspout gardens diffuse and infiltrate the stormwater.
- a 14,000 square foot (1,300 square meter) **ecoroof** and captures and detains precipitation and provides supportive habitat to the area.
- **pervious pavement** was used in the parking lots.

While excavating the site, soil contaminants including cleaning fluids and gasoline were discovered; over 2,200 tons (2,000 metric tons) of contaminated soil were removed from the property and replaced with clean soil and gravel.

Partnerships included: The City of Portland Bureau of Environmental Services (BES), Portland Development Commission (PDC), Housing Authority of Portland (HAP), Bureau of Parks and Recreation (Parks), and Portland Department of Transportation (PDOT), Office of Sustainable Development, METRO, Oregon Watershed Enhancement Board, and US Fish and Wildlife Services.

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