

Methodology to a Watershed Based Approach to Clean Water and Natural Resource Management

Part V

Potential Uses of Watershed Characterization Results



PART V. POTENTIAL USES OF WATERSHED CHARACTERIZATION RESULTS

The knowledge of understanding the science of watershed processes is relatively new and it requires a new paradigm of thinking. Most decisions within Thurston County Resource Stewardship are site based and have limited information on what Thurston County now knows about how the Totten and Eld Inlets and the Deschutes River function as watersheds. To protect and restore water resources in these watersheds, the information from the characterization must be used through the county permitting and planning processes. Following are several county programs where the watershed characterization results can be utilized. Thurston County could use the results of this characterization (best available science) to ground site decisions in a watershed perspective.

Policy and Programmatic Actions

Thurston County Comprehensive Plan

The Thurston County Comprehensive Plan contains an Important Greenspaces Map that identifies areas throughout the County for high priority open space. These areas are a combination of natural hazards (such as wetlands and floodplains), significant wildlife habitat areas, and existing parks and preserves (such as the Nisqually and Black River Wildlife Refuges). It includes both public lands and private properties where a land trust holds a conservation easement.

The Comprehensive Plan provides the overarching guidance for other County programs described below. It also includes policies and definitions about what natural features and habitats warrant County regulations or implementation actions. At the present time, it lacks a definition of a watershed characterization restoration or preservation sites or any management policies. Comprehensive Plan updates relating to critical areas require substantive consideration of supporting science that meets the GMA's Best Available Science criteria (WAC 365-195-900 through 365-195-925)

Potential Actions: 1) The Thurston County Comprehensive Plan, Natural Environment Chapter, should be amended to include a definition of watershed characterization restoration sites, an objective regarding the management approach appropriate for these areas, and specific policies for County implementation actions. 2) The Important Greenspaces Map in the Comprehensive Plan should be amended to include the watershed characterization restoration sites.

Conservation Futures Program

The Thurston County Conservation Futures Program was established as a mechanism to protect open space, timber lands, wetlands, fish and wildlife habitat, and agricultural lands within the boundaries of Thurston County. Conservation Futures funds are used by Thurston County or a local land trust to acquire the land or the rights to future development of the

land for permanent protection. Currently, applications are reviewed and ranked in terms of high to low priority based on a point system.

Potential Actions: 1) The Conservation Futures ranking process should be amended to recognize watershed characterization restoration sites as priority habitat areas, with an added point value.

Open Space Tax Program

The Thurston County Current Use Assessment Program was established to provide deferral of property tax to properties maintained in agriculture, forestry or other open space uses. Properties are evaluated under a point system, called a Public Benefit Rating System, which is similar to the Conservation Futures Program. The existing Current Use Assessment Program does not specifically recognize the watershed characterization results but does give points for the presence of Significant Wildlife Habitat that includes wetlands, streams, floodplain, shoreline, and fish habitat.

Potential Actions: 1) The Current Use Assessment Program should be amended to recognize watershed characterization restoration sites as priority natural resource areas with an added point value.

Compensatory Mitigation Program

Compensatory mitigation could address cumulative unavoidable development impacts through three distinct mechanisms. These include: 1) Permittee Responsible Mitigation (currently done in Thurston County Resource Stewardship through the Critical Areas Ordinance and through SEPA); 2) Mitigation Banking; and 3) In-Lieu Fee Mitigation. Permittee responsible mitigation maintains the liability for the construction and long-term success of the site. Whereas mitigation banking and in-lieu fee mitigation are forms of "third party" compensation, where the liability for project success is transferred to the mitigation bank or in-lieu fee sponsor. At the present, Thurston County does not have off-site compensatory mitigation programs such as wetland banking or fee-in-lieu, although a pilot in-lieu fee program is underway in the Deschutes watershed, funded by the Puget Sound Partnership.

The Puget Sound Partnership provided the grant to undertake pre-capitalization activities that included: a feasibility study, preliminary design plans, and an appraisal. The potential site is a 160 acre parcel located within the Deschutes River floodplain. Watershed Characterization could inform future banking or fee-in-lieu programs regarding which sites provide restoration opportunities. Critical Area Ordinance updates require supporting science that meets the GMA's Best Available Science criteria (WAC 365-195-900 through 365-195-925)

Potential Actions: 1) Thurston County should adopt a compensatory mitigation program that uses Watershed Characterization to identify restoration sites. This would need to identify the type of mechanism to be used (permittee responsible,

mitigation banking, or fee in-lieu). It would need to identify the locations where the program is mandatory and any areas where it would be optional.

Purchase or Transfer of Development Rights Program

In the mid-1990's Thurston County adopted a Purchase of Development Rights (PDR) and a Transfer of Development Rights Program (TDR) for selected agricultural lands within the County. The PDR program purchased the development potential on 940 acres of farm land within the Nisqually Valley. The TDR program was applied to all other long-term agricultural areas. See website. We should provide examples on where we have applied the TDR program.

The intent of the Transfer of Development Rights program is to provide an opportunity for working-land owners to sell their development rights without having to sell their entire property for development. Under this approach, the rural character and agricultural economy of Thurston County is preserved, and working-land owners have the opportunity to realize some of the true market value of their land without having to sell the land altogether for urban development.

Under a TDR program watershed characterization preservation and restoration sites could be identified. Under such an approach, watershed characterization preservation or restoration sites may have the option to transfer the residential development rights to an appropriate receiving location.

Potential Actions: 1) Thurston County should adopt a Transfer of Development Rights Program which includes the identification of watershed characterization preservation and restoration sites, as priority features.

Watershed or Salmon Recovery Plans

Thurston County has been involved in various types of watershed and salmon recovery planning since 1999. For non-point pollution efforts, water resource planning, or other localized needs.

The Nisqually Indian Tribe is lead for water resource planning under ESHB 2514 (watershed planning) and ESHB 2496 (salmon recovery planning). Both of those efforts are active. The Thurston Conservation District serves as the lead entity for salmon recovery efforts in Water Resource Inventory Areas (WRIA) 13 and 14. Planning under ESHB 2514 for WRIA 13 and 14 has been discontinued because of lack of consensus among stakeholders. The current ESHB 2496 salmon recovery efforts in the three WRIs do not recognize watershed characterization restoration sites as potential properties for restoration or long-term protection.

Potential Actions: 1) The salmon recovery plans for WRIs 11, 13 and 14 could be updated to include watershed characterization restoration sites as potential properties for restoration or long-term protection.

Thurston County Capital Facilities Plan

Thurston County adopts a Capital Facilities Plan (CFP) identifying those facilities where the County will fund projects within the next six or twenty years. Transportation projects are a major portion of the CFP. While most new roadway systems throughout the County are proposed by private developments, expansions of existing facilities may be included within the County CFP. New or significantly widened roadways may increase habitat fragmentation and affect high quality habitat areas.

Potential Actions: 1) The Thurston County Comprehensive Plan should be amended to address watershed characterization restoration sites when considering capital improvement projects. 2) Policies could be added that projects within the Thurston County Capital Facilities Plan avoid restoration or preservation sites identified by the Watershed Characterization reports, and if mitigation is required, because an impact can not be avoided, then identified mitigation sites should be pursued whenever practicable..

Stormwater Basin Planning

In the past, Thurston County undertook stormwater basin planning within the urban basins of the north Thurston County urban growth area. Over time the County and the adjacent Cities of Lacey, Olympia, and Tumwater prepared a number of basin plans. All the basin plans include lists of stormwater facilities to be retrofitted. All the basin plans are outdated and would not include any watershed characterization restoration sites.

Potential Actions: 1) The list of stormwater facilities to be retrofitted should be amended by basin to included watershed characterization restoration sites.

Urban Growth Area Boundary Revision

The Thurston County Watershed Characterization results identify high quality natural resource sites that should be taken into consideration when changes to the Urban Growth Area (UGA) boundary are proposed and evaluated.

Potential Action: Utilize the list of high quality natural resource sites from the Watershed Characterization results, when making boundary revisions to UGA boundaries.

Development Regulations

Critical Areas Regulations

Development regulations are means to implement the goals, objectives and policies of the Comprehensive Plan. All local jurisdictions in the state are required to have “Critical Areas” regulation under the State Growth Management Act (GMA). A Critical Areas Ordinance (CAO) covers a wide range of geographic conditions including floodplains, riparian areas, wetlands, and steep slopes. A CAO is a type of development regulation. Thurston County adopted its current CAO in 1994, with some fine-tuning in 1996. Thurston County is seeking to update its current CAO to address new state requirements. Critical Area Ordinance updates require substantive consideration of supporting science that meets the GMA’s Best Available Science criteria (WAC 365-195-900 through 365-195-925).

While a Critical Area regulation can require protection of the current conditions, it lacks the ability to require substantial habitat restoration. For example, if a wetland has been ditched and now only supports monoculture of reed canary grass, (referred to by farmers as ‘wet pasture’) those ecological functions are what the CAO regulations would protect. This is why separate actions are needed by local governments for more ecological restoration and long-term habitat protection. CAO regulations could offer some innovative approaches for regulating critical areas; such as allowing mitigation banking, off-site mitigation, and alternative mitigation approaches. The management of watershed characterization restoration sites is more suitable for these alternative approaches than the traditional site-by-site review process. However, a large lot sub-division, or any proposed development that requires a SEPA review should be subject to restoration sites identified by the watershed characterization results.

The CAO allows for the adoption of special management plans to be developed for specific situations relating to critical areas, such as sub-watersheds or basins. When detailed studies are completed, alternative standards and requirements can be adopted which provide specific development regulations, protection, and restoration potential. Such alternative approaches could include off-site mitigation when it can be shown to provide equal or greater benefits than on-site mitigation. While such an approach is most commonly associated with wetland mitigation, it might be equally suitable for streams, riparian, or prairie areas where off-site mitigation may provide greater watershed restoration benefits. Either could be linked to the compensatory mitigation program describe above.

Potential Actions: 1) The Thurston County Critical Area Ordinance (CAO) should be amended as watershed characterizations are completed. An alternative set of regulations should be adopted that provides equal or better watershed restoration benefits. 2) New regulations should be adopted regarding aquatic and terrestrial habitats and may include; a) minimum forest cover standards, b) minimum patch size for various habitats, c) a change of allowed uses to those which are defined as ‘low intensity’, and d) avoidance provision for the location of new upland roads similar to those currently in place for wetlands. 3) These special regulations could be linked to the adoption of a compensatory mitigation program.

Stormwater Regulations - Low Impact Development

Stormwater regulations are a type of development regulation described by the Thurston County Comprehensive Plan and the State Growth Management Act. Thurston County and the Cities of Lacey, Olympia, and Tumwater are regulated by the Washington State Department of Ecology (Ecology) through a National Pollution Discharge Elimination System (NPDES) phase II permit. Thurston County and the Cities of Lacey, Olympia, and Tumwater have all adopted an equivalent to Ecology's manual.

The proposed 2012 NPDES Phase II permit requires Low Impact Development (LID) as a set of techniques to minimize the development impacts of new development. LID covers a wide variety of practices intended to mimic natural hydrologic patterns and therefore reduce the negative impacts development has on hydrology and water quality. The application of LID techniques can offer a number of advantages over traditional, engineered stormwater drainage approaches, where feasible

Possible Actions: 1) The Thurston County Stormwater Drainage Manual should be amended to incorporate the watershed characterization restoration or preservation sites in lieu of LID practices.

Non-Regulatory Conservation Efforts

Land Trusts

There are many organizations and programs set-up to acquire properties for habitat conservation. Land trusts are one of these. They manage lands for a variety of open space and wildlife habitat purposes, and acquire properties through a fee simple purchase or a conservation easement which restricts the future use and development of the site. Within southern Puget Sound the Cascade Land Conservancy, Capital Land Trust, and Nisqually Land Trust are all active.

The Nisqually Land Trust (WRIA 11) and the Capitol Land Trust (WRIA 13 and 14) have been active in acquiring parcels and conservation easements. This has been through a collaboration of funding sources including Conservation Futures, the Open Space Tax Program, and Salmon Recovery funding.

Possible Actions: 1) Thurston County should continue to support the actions of local land trusts to acquire parcels and conservation easements for the purpose of natural resource protection. 2) Encourage land trusts to participate in collaborative efforts which that would include watershed characterization restoration and preservation sites.

South Puget Sound Salmon Enhancement Group

The South Puget Sound Salmon Enhancement Group (SPSSEG) is one of fourteen Regional Enhancement Groups created by the State in 1990 to protect and restore salmon populations. By obtaining grants and donations it undertakes aquatic restoration projects. This is often done in cooperation with other conservation organizations.

Possible Actions: 1) Encourage SPSSEG to consider watershed characterization restoration sites as possible future projects. 2) List SPSSEG as a possible restoration partner in future updates of the Capitol Facilities Plan by the Thurston County Resource Stewardship Department – Water Resources Program.

Stream Team

Thurston County and the Cities of Lacey, Olympia, and Tumwater have organized citizen based, volunteer stream teams to assist in various education and restoration efforts within the communities. This can often involve other environmental and civic groups (such as schools, scout troops, etc.). The volunteer approach offered by the Stream Team may have a higher success rate in interacting with these property owners than other governmental techniques.

Possible Action: 1) Identify watershed characterization restoration sites that may assist in prioritizing Stream Team restoration efforts with a limited budget.

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