

# CITY COUNCIL DISCUSSION TOPICS

## JULY 27, 2006 MEETING

### Wetland Classification and Rating System and Stream Typing System

#### *Should wetland classification and rating system be revised?*

**Status:** City's current categories "Significant" and "Important" designations are based on the outdated 1983 King County three-tier classification system.

**Best Available Science (BAS) Recommendation:** Adopt Ecology's four-tier classification and rating system which is based on BAS. Note: Changing the ratings system would not require that all wetlands be re-rated, rather they would be rated under the new Ecology system as needed.

#### Classification System

- Differentiates wetlands based on:
  - Functions
  - Rarity
  - Sensitivity to disturbance
  - Irreplaceability
- Wetlands are placed in one of four categories, according to their functions and values:
  - **Category I:** wetlands with unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain some ecological attributes that are impossible to replace within a human lifetime, or provide a very high level of functions. Wetlands scoring 70 points or more (out of 100) on the on the questions related to functions.
  - **Category II:** wetlands rare plant species; or having moderately high level of ecological functions that may not be adequately replicated; or wetlands scoring between 51-69 points (out of 100) on the questions related to the functions. Includes estuarine wetlands <1 acre, or disturbed estuarine wetlands >1 acre; and an interdunal wetlands >1 acre.
  - **Category III:** wetlands with a moderate level of functions and scoring between 30-50 points using the DOE rating system. Includes interdunal wetlands between 0.1 and 1 acre in size. Category III wetlands often disturbed, less diverse or more isolated.

- **Category IV:** hydrologically isolated wetlands ≤1 ac with 1 wetland class and, dominated by non-native monotypic vegetation; or ≤2 ac with one class and >90% cover of non-native plants. Category IV wetlands have the lowest levels of functions (scores less than 30 points) and are often heavily disturbed.

### **Rating System**

- Developed in early 90s, updated 2004
- 4 Categories (I to IV) reflecting the level of protection and management needed
- Used to prescribe criteria for avoidance, buffer widths, and mitigation ratios
- Qualifies as “best available science”
- Assesses wetland functions in three main groups:
  - Habitat (for the many wetland-dependent plant and animal species)
  - Water quality improvement (removing sediments, nutrients, toxicants)
  - Hydrologic functions (reducing flooding & erosion, recharging groundwater, supporting baseflow).
- Using the rating system, an overall score and category for the wetland is determined.
- Rating system provides individual scores for the wetland’s water quality, hydrological, and habitat functions. Scores are used to determine the wetlands classification and the minimum buffers.

### **Planning Agency Recommendation:**

Adopt the Washington Department of Ecology Wetland Rating System for Western Washington (August 2004).

### **Council Environment Committee Recommendation:**

Initial recommendation was to adopt something similar to what King County or the City of Sammamish adopted. Staff noted that both King County and Sammamish adopted the Washington Department of Ecology Wetland Rating System for Western Washington (August 2004). The Environment Committee recommendation was pending Planning Agency review.

### **City Council Recommendation:**

***Should stream categorization system be revised?***

**Status:** City’s current stream categorization system uses “Significant” and “Important” ratings based on the State Forest Practices Board water typing system (Types 1-5, WAC 222.16.031).

**BAS Recommendation:** Adopt the State’s permanent typing system that is based on shorelines of the State, fish presence, and flow regimes (WAC 222.16.030).

- State has established an interim system (Table 1) that will be used until the habitat mapping process used to classify the streams has been completed.

**Table 1. Conversion between State interim and permanent water typing systems.**

<b>Permanent Water Type</b>	<b>Interim Water Type</b>
Type S – shorelines of the State	Type 1
Type F -- have a high fish, wildlife, or human use	Type 2, 3
Type Np – perennial, nonfish habitat	Type 4
Type Ns -- Seasonal, nonfish habitat, surface flow is not present for at least some portion of the year and are not located downstream from any Type 4 Water stream reach	Type 5

- All streams in the City of Des Moines have been mapped and classified (Table 2). It should be noted that Unnamed 2, 3, and 4 were just added based on the State Forest Practices Board database – they are small drainages. There are a few reaches on some of the other creeks that the City’s consultant Grette Associates may wish to add to City maps, based on the same database.

**Table 2. City of Des Moines streams as mapped by the State Forest Practices Board.**

<b>Stream (North to South)</b>	<b>Permanent DNR Stream Type<sup>1</sup></b>
<b>Des Moines Creek</b>	F
<b>Massey Creek</b>	F
Main Stem	F
South Fork	F
North Fork (Barnes Creek)	U (stream type unknown, likely F and N reaches)
<b>Unnamed Creek 1 (Zenith)</b>	U (stream not mapped in FPARS database, likely N)
<b>McSorley Creek</b>	
Main Stem	F
Small Tributaries	N
South Fork	F, U
North Fork	N, U
<b>Unnamed Creek 2</b>	N
<b>Unnamed Creek 3</b>	N

Stream (North to South)	Permanent DNR Stream Type <sup>1</sup>
<b>Woodmont Creek</b>	
Lower Creek	F
Upper Creek	N
<b>Unnamed Creek 4</b>	U
<b>Redondo Creek</b>	
Main Stem	F, N
Tributaries	N, U
<b>Cold Creek</b>	
Main Stem	F
Tributary	U

<sup>1</sup> Stream types taken from State Forest Practices Board on-line mapper on the DNR website, <http://www3.wadnr.gov/dnrapp5/website/fpars/viewer.htm>.

### **Planning Agency Recommendation:**

Adopt the Washington State Forest Practice Board permanent stream typing system (WAC 222.16.030).

### **Council Environment Committee Recommendation:**

Adopt the Washington State Forest Practice Board permanent stream typing system (WAC 222.16.030) pending Planning Agency review.

### **City Council Recommendation:**