

Presentation to City Council December 14, 2006

City of Des Moines Critical Areas Ordinance Update

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Discussion Topics

- Process Overview
- Findings from Critical Area Inventory
- Wetland and Stream Buffers
- Wetland Mitigation Ratios
- Development Standards for Geologically Hazardous Areas
- Development Standards for Fish and Wildlife Habitat Conservation Areas (FWHCAs)
- Critical Aquifer Recharge Areas (CARAs)
- Council Recommendations

Process Overview

- Best Available Science Review (July 2005)
- Critical Areas Inventory (June – Sept. 06')
- State Agency Presentations (June 06')
- Planning Agency Review (June – Nov. 06')
- Council Environment Committee Review (June – Dec. 06')
- Public Involvement (ongoing)

Findings from CA Inventory (Wetlands, Streams & FWHCAs)

- Verified/potential critical areas – 59 wetlands, 10 streams, and 31 FWHCAs.
- Wetlands -- based on rough and full categorizations:
 - 0 Category I wetlands (most significant)
 - 16 Category II wetlands (6 fully categorized)
 - 39 Category III wetlands (10 fully categorized)
 - 4 Category IV wetlands (least significant)
- Streams:
 - 26 stream reaches identified and mapped
 - Des Moines, Massey, McSorley, Woodmont, Redondo and Cold Creek considered Type F Streams (existing/possible salmonid presence)
- FWHCAs:
 - 19 features based on priority habitat and species data (WDFW)
 - 12 features from marine areas within shoreline zone

Wetland Buffers

- DMMC 18.86.070(2) establishes buffer requirements for wetlands:
 - “Significant” wetlands – 100-foot buffer
 - “Important” wetlands – 35-foot buffer
- Current wetland buffer widths cannot meet Best Available Science (BAS):
 - Based on an outdated classification system (King County three-tier)
 - Below those recommended by Ecology derived through BAS
- Ecology’s Alternative 3 for buffer widths would provide the City with the most flexibility:
 - Determined based on the wetland rating, intensity of land use impacts, and functions or sensitivity of wetland to disturbance
 - Includes criteria to increase, decrease and average buffers
 - Supported by BAS review, critical areas inventory, Planning Agency and Environment Committee reviews

Ecology Buffer Alternative 3

Buffer Widths – Based on Wetland Category, Intensity of Land Use Impacts and Degree of Wetland Function or Special Characteristics

Category I Wetlands	
High Habitat function (Habitat score 29-36)	300
Moderate Habitat function (Habitat score 20-28)	150
High Water Quality function and Low Habitat function or none of the above characteristics (Habitat score < 20)	100
Category II Wetlands	
High Habitat function (Habitat score 29-36 points)	300
Moderate Habitat function (Habitat score 20-28)	150
High Water Quality function and Low Habitat function or none of the above characteristics (Habitat score < 20)	100
Category III Wetlands	
Moderate Habitat function (Habitat score 20-28)	150
Low Habitat or not meeting above criteria (Habitat score <20)	80
Category IV Wetlands	
	Width of Buffer (feet)
Low functions	50

Note: Removed information and buffers associated with the following wetlands that are not relevant to Des Moines:
 Category I -- Natural Heritage, bogs, estuarine, and wetlands in coastal lagoons and Category II – Estuarine and Interdunal.

Wetland Mitigation Ratios

- DMMC 18.86.107(1)(a)(i) establishes wetland mitigation ratios:
 - Class 1 and 2 wetlands on a 2:1 type and acreage basis
 - Class 3 wetlands on a 1:1 type and acreage basis
- Wetland mitigation ratios would not meet BAS of the new wetland and stream classifications.
- BAS review recommends the following minimum mitigation ratios:
 - 6:1 for Category I
 - 2:1 for Category II
 - 1.5:1 for Category III and IV
- New ratios provide flexibility to require smaller mitigation ratio where necessary and higher mitigation ratios where appropriate.
- Avoidance and minimization of wetland impact is required, and wetland fill or buffer impact is only allowed where reasonable use is precluded without it.

Stream Buffers

- DMMC 18.86.070 (1) establishes buffer requirements for streams:
 - “Significant” streams (Types 1, 2, 3) – 100-ft buffer
 - “Important” streams (Type 4, 5) – 35-ft buffer
- Current stream buffer widths are below or at the low-end of effective widths for various buffer functions.
- BAS recommends adopting King County stream buffers for urban environments (reflect BAS).
 - Reviewed buffer function and effective widths
 - Dependent on stream type – urban vs. rural area

Stream Type	Buffer Width (feet)
Types S or F	115
Types Np or Ns	65

- Alternately, City could evaluate buffers on a stream-by-stream and reach-by-reach basis using BAS.

Fish and Wildlife Habitat Conservation Areas (FWHCAs)

- DMMC 18.86.085 establishes buffers and disturbance limitations for FWHCAs.
- BAS Recommendations:
 - Add provisions regarding the alteration of habitat
 - Add section addressing specific habitats:
 - Provisions for endangered, threatened and sensitive species
 - Provisions for anadromous fish
 - Consider conducting spawning surveys of in-city streams (City/WDFW)
 - Create a map of all documented FWHCA in City

FWHCA Inventory

- FWHCA inventory completed Summer 06'
- Inventory based on current WDFW priority habitat and species (PHS) data:
 - 31 FWHCAs identified
 - Two wetland areas incorporated into wetland inventory
 - Two ravine areas on Massey and Woodmont Creeks (not part of PHS data)
 - Mapped habitat areas within the marine shoreline zone

Development Standards for Geologically Hazardous Areas

BAS review recommendations:

- *DMMC 18.86.077 Hillsides of 15 percent slope and greater.* Add a section that discusses drainage and control of site runoff in order to maintain the stability of the slope.
- *DMMC 18.86.078 Seismic hazard areas.* Add a section that discusses development requirements in liquefaction prone areas.
- *DMMC 18.86.079 Landslide hazard areas.* Add a section that prescribes top and bottom of slope set back limits from landslide hazard areas and under what conditions these set backs may be reduced from the prescriptive values.
- *DMMC 18.86.080 Erosion Hazard Areas.* Expand section to include key elements regarding: temporary erosion and sediment control plans; drainage requirements; and allowance for a dry season grading extension if the site meets certain conditions.

Critical Aquifer Recharge Areas

- *DMMC 18.04.212 Critical Aquifer Recharge Area.*
Revise definition to clarify that:
 - Ecology provides guidance on the means and methods to identify CARAs
 - King County DOH provides guidance on how to define a wellhead protection zone.
- *DMMC 18.86.083 Aquifer Recharge Areas.*
Expand section to include:
 - Requirement of a special environmental study, who can perform such as study, what types of development cannot occur within CARAs.

Next Steps

(December 06' - February 07')

- Policy guidance from Council on proposed CAO amendments (Dec. 06' – Jan. 07')
- 60-day notice to adopt and draft CAO Amendments to CTED (Dec. 06')
- SEPA determination (Jan. 07')
- Public Hearing (Jan./Feb. 07')
- Adopt CAO (February 07')