



Legislation Text

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AN ORDINANCE establishing a demonstration project, as authorized under K.C.C. chapter 21A.55, for alluvial fan management pilot projects located outside areas of shoreline jurisdiction.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Findings:

A. Alluvial fans occur where streams carrying sediment change from a steeper slope to a flatter slope and lose their capacity to move sediment and sediment drops out of the water column. Alluvial fans fill in the existing stream channel and force the stream to another location creating the characteristic fan shape over time. When a stream is forced out of its channel on developed alluvial fans, it damages infrastructure such as roads, structures and utilities, as well as flooding surrounding property.

B. Alluvial fans are the result of dynamic physical processes and in many cases provide beneficial ecosystem services such as multithreaded stream channels with slow-moving water and abundant food for rearing fish. For example, the alluvial fans of the Tolt and Raging rivers are very high priority salmon habitat. They are also a component of landslide hazard areas as defined in K.C.C. 21A.06.680 and are regulated under King County's critical areas regulations in K.C.C. chapter 21A.24.

C. Because much of the county's farmland is located in valley floors below relatively steep valley walls, many of the county's farms are impacted by alluvial fans. Alluvial fans fill agricultural drainage channels as a result of both normal ongoing deposition of sediment and larger episodic deposition events, which deposit upslope sediment and debris in agricultural fields.

D. In addition to being used for farming operations, many alluvial fans have been developed with residential structures or with infrastructure, or are used for recreational purposes.

E. King County's existing regulations and the lack of approved management practices make it difficult to remedy the impacts of alluvial fan deposits on farm operations, infrastructure, residential and recreational uses.

F. The 2009 FARMS REPORT (Future of Agriculture Realizing Meaningful Solutions) identifies alluvial fans as an ongoing problem for operational needs of farmers and landowners in Agriculture Production Districts and for protection and improvement of fish spawning habitat in tributary streams. The report calls for the county to work collaboratively with other groups to implement and monitor a variety of model projects to manage alluvial fans.

G. The 2012 King County Comprehensive Plan policy R-671 states that the county should use pilot or demonstration projects and multiagency collaboration to develop a new suite of practices that will provide options for landowners whose existing operations are affected by alluvial fan deposits. These should provide timely and cost-effective relief from debris and the associated changes to the watercourse along with protection of intact fish habitat and restoration of degraded fish habitat within these areas.

H. The 2012 King County Comprehensive Plan policy E-499.f calls for the county to improve the management of alluvial fans by developing and clarifying definitions of alluvial fans and developing appropriate management strategies. Strategies should protect intact habitat and restore degraded habitat, reduce threats to public safety and accommodate existing land uses. Findings from pilot projects should inform management strategies for alluvial fans.

I. Comprehensive Plan policy E-499.f also calls for mapping the locations of existing alluvial fans. King Conservation District has completed some mapping. Additional mapping is not part of the demonstration project.

SECTION 2. The definitions in this section apply throughout this ordinance unless the context clearly

requires otherwise.

A. "Alluvial fan" means a typically fan shaped accumulation of silt, sand, gravel and boulders created when flowing water slows down and the sediment transport capability of the water is reduced.

B. "Sediment management facility" means a system that promotes the deposition of sediment to a specific location or contains the deposition of sediment to a specific area.

SECTION 3. As allowed under K.C.C. chapter 21A.55, the council hereby authorizes the alluvial fan demonstration project, which shall comply with the following:

A. The purpose of the alluvial fan demonstration project is to:

1. Provide options for farmers and landowners whose existing operations or facilities are affected by alluvial fan deposits;

2. Identify ways to protect or preserve existing infrastructure on developed alluvial fans and to protect or preserve agricultural, residential or recreational uses on developed alluvial fans;

3. Locate deposition material where it can be removed with less impact to the aquatic area and the fish and animals that utilize that aquatic area than would result from dredging long sections of the aquatic area;

4. Determine if innovative permit processing and limited modifications of certain development standards and permit requirements will result in protection of infrastructure, agricultural, residential or recreational uses on developed alluvial fans; and

5. Develop best management practices for addressing alluvial fans to meet operational needs of farmers and landowners and to protect and to reduce the impact to the aquatic area and the fish and animals that utilize the aquatic area;

B. The demonstration project shall consist of up to five individual projects located within the Snoqualmie river watershed basin outside areas of shoreline jurisdiction and shall be implemented within streams with mean annual flows of less than twenty cubic feet per second. The individual projects shall be allowed on alluvial fans with existing infrastructure, including, but not limited to structures, utilities, roads,

fences and pipe systems or cleared alluvial fans used for agricultural or recreational purposes.

C. The demonstration project shall be administered jointly by the department of natural resources and parks, water and land resources division, and the department of permitting and environmental review. The departments are authorized to implement the development standards of K.C.C. Titles 9 and 16 for permit review and of K.C.C. Title 21A, as modified in subsection D. of this section. The roles and responsibilities of each department are as follows:

1. The department of natural resources and parks shall:

a. administer county-supported projects through the water and land resources division storm water services section, including design support, inspection and monitoring;

b. assign a project manager and contact person;

c. coordinate with the Washington state Department of Fish and Wildlife, permit agencies, the King County agricultural commission, the King Conservation District, farmers and landowners, as needed;

d. review each project for compliance with K.C.C. chapter 21A.24 and other applicable development regulations jointly with the department of permitting and environmental review; and

e. prepare the report to council as required in subsection G. of this section;

2. The department of permitting and environmental review shall:

a. review each project for compliance with K.C.C. chapter 21A.24 and other applicable development regulations jointly with the department of natural resources and parks; and

b. conduct site inspections to determine whether each individual project is in conformance with the agreed design; and

3. The department of permitting and environmental review shall make the final decision to approve or deny required permits based on the criteria in subsection F. of this section. The department of permitting and environmental review shall consult with the department of natural resources and parks prior to issuing its decision.

D. For the purposes of this demonstration project, the following development standards are modified as set forth in this subsection and shall be implemented by the department of natural resources and parks, water and land resources division, and the department of permitting and environmental review:

1. K.C.C. 21A.24.045. The allowed alterations table and alterations conditions text is modified to allow construction of new sediment management systems in or adjacent to aquatic areas and the buffers of grazed wet meadows on alluvial fans;

2. K.C.C. 21A.24.240. The zero-rise flood fringe development standards and alternations are modified to allow flexibility in placement of excavated sediment and to allow for a possible negligible rise in either base flood elevation or minor reduction in flood storage, or both, due to implementation of an individual demonstration project, but only if the impacts will not create any measurable off-site increase in the base flood elevation;

3. K.C.C. 21A.24.230, K.C.C. 21A.24.270 and King County Surface Water Design Manual section 1.3.2 special requirement #2 flood hazard area delineation are waived. For the purpose of each individual project the Flood Hazard Area shall be assumed to cover the entire alluvial fan. The extent of the alluvial fan shall be shown on the project engineering drawings;

E. The following process shall apply to requests for permits under this ordinance:

1. The department of natural resources and parks shall identify individual projects and verify that the proposed projects meet the criteria for coverage under this ordinance;

2. Individual project applications shall include engineering drawings for review and approval, specifying project location, construction sequence and timing. Each application shall also include a critical areas report including a wetland delineation and wetland classification identifying critical areas, and an impact analysis identifying function and area impacted. Before impacting critical areas, the project must meet K.C.C. 21A.24.125, avoiding impacts to critical areas;

3. The total fees for permits and review charged by the department of permitting and environmental

review shall not exceed nine hundred eighteen dollars and seventy cents for each farm-related project included in this demonstration project and located within the Agricultural Production District or on RA-zoned lands with an approved farm management plan. Projects located in other locations shall pay standard fees; and

4. All permits shall be issued subject to securing applicable state and local permits and landowner permission.

F. The department of permitting and environmental review shall modify or waive the standards discussed in subsection D. of this section for each project proposed under this ordinance if the following provisions are met:

1. The approval does not require the modification of a critical area development standard except as modified by this ordinance;
2. Adverse impacts to critical areas or their buffers have been minimized;
3. The proposed construction and operation of the facility is in conformance with the King County surface water drainage manual flow control and water quality standards;
4. There is no net loss of ecological function; and
5. The development proposal does not pose an unreasonable threat to the public health, safety or welfare.
6. Within aquatic areas and grazed or tilled wet meadows and their buffers:
 - a. in-stream work is not located in habitat used for salmonid rearing or spawning or by species listed as threatened or endangered by the state or federal government unless the department determines that there is no other feasible location;
 - b. the mean annual flow of the aquatic area is less than twenty cubic feet per second;
 - c. the project is located outside of shoreline jurisdiction;
 - d. the construction occurs during periods approved for in-stream work; and
 - e. the facility will not adversely impact area hydrology or diminish flood storage capacity;

7. Within landslide hazard areas with less than forty percent slope:

- a. the proposed alteration will not decrease slope stability on contiguous properties; and
- b. the risk of property damage or injury resulting from landsliding is eliminated or minimized; and

G.1. The demonstration project shall run from the effective date of this ordinance to not longer than six years after the effective date of the ordinance, at which time it expires.

2. No later than three months before the expiration date of this ordinance, the department of natural resources and parks, in consultation with the department of permitting and environmental review, shall transmit a review and evaluation of the demonstration project with a recommendation on further action and proposed legislation, if any, to the executive. The evaluation report shall identify how many individual demonstration projects were permitted and constructed, their locations and information on their cost, operation and environmental effectiveness, to the extent practical. It shall further identify best management practices learned from the demonstration projects; and

3. No later than two months before the expiration date of this ordinance, the executive shall transmit the evaluation report and a recommendation on further action and proposed legislation, if any, to the council. Any document transferred under this subsection G.3. shall be transmitted in the form of a paper original and an electronic copy to the clerk of the council, who shall retain the paper original and forward electronic copies to all councilmembers.