

Pierce County Comprehensive Flood Hazard Management Plan - Problem Prioritization

The following prioritization matrix is intended to help prioritize the level of effort (Tier 1, 2, or 3) that will be expended on identified problems in developing alternative solutions, carrying out feasibility analyses, and developing a conceptual project design and cost estimate. Focus will be on the flood risk/vulnerability perspective, severity and flood frequency.

1) Existing land use of affected area (Consequences)

This criterion is intended to give different weights to different types of land uses. Use the score range provided to give more or less weight based on site specific conditions. For example, a sole access road would be given a higher score than one for which a reasonable alternative route exists.

Description	Score
<p>Critical Assets are defined as critical facilities, critical infrastructure, and environmental assets. Please see the below definitions.</p> <p>Critical facility: A critical facility includes, but is not limited to, schools, nursing homes, hospitals, police and fire stations, emergency response installations, installations that produce, use or store hazardous materials or hazardous waste, or installations that serve a large number of people. For purposes of the Title 18 PCC series, "critical facilities" is a generic term that encompasses other more specific terms such as essential facilities, hazardous facilities, or special occupancy structures, but does not include utility facilities (utilities) that are located underground or are predominately underground, do not aggravate the hazardous conditions, and are generally not subject to damage from flood or lahar inundation.</p> <p>Critical Infrastructure: Critical infrastructure are facilities and services needed to sustain industry, residential, and commercial activities. Infrastructure may include, but is not limited to; water and sewer lines, major arterial roads, and communication lines. From an Economic Development perspective, infrastructure also includes environmentally safe siting, an adequately trained labor force, and a transport network that includes an adequate commercial transportation system of roadways, rail system, and air freight.</p> <p>Environmental Assets: include land, natural biological resources such as timber and fish, mineral and energy resources, water resources and soil.</p>	6-10
Commercial/Industrial/employment centers (Mt. Rainier as commercial) - low # for fewer facilities	4-9
Public Infrastructure (all other roads)	5-7
Residential (Urban and high-density residential)	5-8
Residential (Rural and low-density residential)	3-5
Resource Lands (Agricultural, Timber, Mining)	3-4
Developed Recreational (Those with regional importance should receive higher scores.)	1-2

2) Severity of potential flood or channel migration impact (Consequences and Severity)

This criterion is intended to evaluate the type and magnitude of the impacts irrespective of the scale at which the impact will occur. The scoring range can be used to differentiate between similar types of impact that have different likelihoods of occurring.

Description	Score
Public Safety - Human injury or death could result from deep fast flows or sudden changes in flood conditions (e.g. levee or road failure). - Chronic problem area	9-10
Public Safety - Human injury or death could result from deep fast flows or sudden changes in flood conditions. – Infrequent occurrence (e.g., did not evacuate) or anticipated problem area.	5-8
Severe Infrastructure or Property Damage - Total loss of developed land use (e.g. developed land is converted to river channel.).	7-8
Moderate to Severe Infrastructure or Property Damage - Severe flood or erosion damage that will heavily impact those affected.	5-6
Minor to Moderate Infrastructure or Property Damage - Moderate flood or erosion damage which will not likely have a long-term impact on those affected.	3-4
Minor Flooding - Flooding that interrupts human activity or will result in some clean up needs, but which will result in little or no damage that will need to be repaired (e.g., yards, driveways, minor streets).	1-2

3) Area of impact (Consequences and Severity)

This criterion describes the scale of the problem. Does the problem manifest over a large area or in a manner that will affect a large number of people? In instances where the physical impact is over a small area, but a larger number of people will be affected, apply score based on the impact rather than just the physical area. Scoring range can be used to differentiate between different degrees of extensiveness within the listed categories.

Description	Score
Regional (Impacts will be felt well outside the area in which the flooding or erosion occurred.)	8-10
Major: is defined to have extensive inundation of structures and roads. Significant evacuations of people and/ or transfer of property to higher elevations are necessary. (City centers, larger neighborhoods (>20 homes).)	6-7
Moderate: is defined to have some inundation of structures and roads near the stream. Some evacuations of people and/or transfer of property to higher elevations may be necessary. (Numerous structures (e.g., 5-20 homes), roads/levees/revetments impacted.)	3-5
Localized (Affects a few homes (e.g., <5), or businesses.)	1-2

4) Frequency of flood or channel migration occurrence impact (frequency)

This criterion is used to describe how often economic and/or structural damage has occurred from flood or channel migration events. (i.e., a channel migration event is any significant landward bank erosion.).

Description	Score
Three or more occurrences in the last 30 years	8-10
Two occurrences in the last 30 years	5-7
One occurrence in the last 30 years	1-4