

Responses to Questions from the April 29, 2010 Advisory Committee Meeting

At the April 29 2010 Advisory Committee meeting members discussed the proposed 2011-2016 capital program, including new project proposals. This memorandum provides staff responses to several questions raised by the Advisory Committee members; some of the issues will be discussed further with the Basin Technical Committees to develop clarifying recommendations.

For reference, the Flood District's flood risk project evaluation criteria are attached, along with the project proposal submitted by the City of Seattle for the Seawall.

Question 1: What is the risk of failure for the Alaskan Way Seawall, and what are the potential economic and life safety impacts of a failure?

Based on information provided by the City of Seattle, there is a 1 in 10 chance of significant damage or failure from an earthquake over the next 10 years. This is an increase from the 1 in 20 chance over 10 years estimated by the Washington State Department of Transportation from 2006, and the increased risk is based on recent more thorough inspections of the seawall. There is also a risk of failure from deterioration combined with the effects of tidal inundation and storm surges. While earthquake risk is significant for the seawall and adds to the urgency of the project, this type of risk was not formally evaluated across the county's flood facilities.

Consequences of failure provided in several technical reports prepared by the Washington State Department of Transportation, the Army Corps of Engineers, and the City of Seattle are as follows:

"If the seawall were to fail, sections of the viaduct and adjacent structures and utilities could collapse or become unsafe, damaging Seattle's waterfront and potentially resulting in loss of life."

"A large seismic event could potentially displace liquefiable soils, exerting pressures up to three times the original pressures the structure was constructed to withstand, potentially leading to failure of the wall. Failure could be limited to isolated sections or could be very extensive."

"Downtown Seattle was developed with the seawall in place and relies on its continued existence. The seawall holds the soil in place along Seattle's waterfront that supports vital infrastructure and services:



- The seawall supports and protects major utilities, including power for downtown and the region, sewer water, storm water, combined sewer overflow (CSO), natural gas and telecommunications.
- The seawall supports the Alaskan Way Viaduct that carries State Route 99 and approximately 110,000 vehicles a day and the Colman Dock ferry terminal, with over 8,800,000 annual riders.
- The seawall supports and protects the Burlington Northern Santa Fe rail lines in the region, which serve both north/south and east/west freight movement for the nation and passenger rail service for the region.
- The risk to life safety is underscored by a sidewalk collapse in May 2009
- Seawall collapse and inundation affects would extend 70 to 140 feet landward from the shoreline , threatening millions of dollars of public and private infrastructure, transportation facilities and local businesses
- There are more than 1,100 businesses within one block of the project area.”

More information is available here:

City of Seattle:

<http://www.cityofseattle.net/transportation/seawall.htm>

<http://www.seattle.gov/mayor/documents/SeawallReplacementFactSheet.pdf>

Army Corps of Engineers:

http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=ELLIOTTBAY&pagename=ELLIOTT_MAIN

Washington State Department of Transportation:

http://www.wsdot.wa.gov/NR/rdonlyres/B1EF4B56-8961-401B-BFB3-9864A60EBC22/0/ProjectAreaThenandNow_tabloid.pdf

Question 2: What is the basis for the flood risk scoring of the Seawall project?

Committee members were concerned about the basis for the 100% score for the Seawall project. As noted at the April 29 meeting, the fundamental question is not whether a coastal flood hazard project scores X% or Y% against the flood risk criteria, the question is whether the flood risk criteria should be applied to coastal projects such as the Seawall. The policies in the 2006 King County Flood Plan are focused on river flooding and channel migration risks rather than coastal hazards, and the current scope of the Flood District’s adopted work program only includes coastal hazard mapping and analysis rather than capital projects. Basin Technical Committee members did not agree on how to evaluate coastal hazard projects – some felt that it was inappropriate to even score the project until a policy decision was made regarding the inclusion of coastal hazards, while others felt that the capital program was intended to be dynamic with the prioritization

criteria applied to new problems as they arose based on the assumption that 'flooding is flooding' regardless of the type of flooding or the geographic location within King County.

Basin Technical Committee members did not question the merits of the seawall replacement project; there was however a fundamental question as to whether the Flood District is the appropriate funding source for this type of infrastructure need. In each of the BTC discussions, however, participants agreed that a decision to expand the scope of the capital program to include coastal areas was a policy rather than technical decision for the Advisory Committee and Board to consider, rather than technical staff. For this reason staff developed the options presented at the April 29 meeting to inform the Advisory Committee's deliberations. The project was scored, subject to the need for policy guidance, similar to the Seawall feasibility study originally scored in 2007 for the 2008 capital program. The scoring criteria are attached to this memo, and the application to the Seawall is summarized here:

Scoring Factor: Consequences of Flooding or Channel Migration

Points are provided based on land uses, with critical public facilities and residential land uses scoring relatively higher than other land uses.

The Seawall proposal received 12 of 12 points due to the potential impacts of seawall failure on critical public infrastructure

Scoring Factor: Regional Economic Benefit Bonus Points

Points are awarded for PSRC-identified Manufacturing and Industrial Centers, WSDOT Strategic Freight Corridors, or high concentrations of employment.

The Seawall proposal received all five bonus points, as it directly affects all three of these: the northern extent of the Duwamish Manufacturing and Industrial Center, Alaskan Way and the Alaskan Way Viaduct (Yesler south to Marginal Way, and the central business district is part of a regional growth and employment center).

Scoring Factor: Severity of Impact

Points are awarded based on the nature and severity of the impacts, with likely human injury or death scoring higher than loss of developed land use or damage that causes minimal damage or interruption.

The Seawall project received eight out of twelve points, as a seawall failure would result in total loss of developed land use in the area protected by the seawall. It was not assumed that human injury or death would result. However, it should be noted that the May 2009 sinkhole caused a section of sidewalk to collapse and trap a pedestrian – considering this type of direct risk to public

safety the project could have scored higher on this criterion (see <http://www.kirotv.com/news/19526262/detail.html>).

Scoring Factor: Extent of Impact

Points are awarded based on an assessment of whether the problem is manifest over a large area or a large number of people versus a relatively localized issue.

Given the infrastructure in place, the number of people living and working in the area, and the regional role of commercial development in this area, the Seawall project received eight of eight points available.

Scoring Factor: Urgency

Points are awarded based on how soon the impact will occur, with the most points available for projects that prevent damages likely to occur in the 'next major high flow event'.

The project received six of six points available because of the steady deterioration of the structure and the fact that a large storm event and tidal surge and/or an earthquake could cause failure of the structure. Earthquake risks were generally not evaluated across other projects in the capital program.

Question 3: The 2008 capital program included funding for the Seawall (\$2 million). Was there a previous commitment or agreement to fund construction of the Seattle Seawall?

The last Advisory Committee discussion of the Seattle Seawall was in June of 2007 in the context of the proposed 10-year work plan and levy rate. The June 8 2007 meeting report, included in the August 2007 Advisory Committee report to the Board of Supervisors, includes the following:

"There was a brief discussion about "coastal" projects, since the Alaskan Way Seawall had appeared on the sequenced list of projects, but had not been originally included in the *Flood Hazard Management Plan*. Staff explained that the *Flood Plan* had recommended coastal mapping work but confirmed that capital recommendations for coastal flooding were not in the *Plan*. This project was a city identified one."

The Advisory Committee did not discuss or recommend funding for construction during the 2007 meetings.

Question 4: How can we keep projects from being continuously delayed in response to new and emerging needs? With respect to flood repair projects, how can we stop chasing the last flood and prepare for the next flood?"

Options will be discussed with the Basin Technical Committees in mid-June. Possible approaches to reduce delays and the impact of new proposals include:

- Curtail or limit the frequency of new project requests.
- Put a cap on the dollar amount available under new project requests
- Include a 'maintenance and repair' component to the budget so that there is funding available for repair projects. This funding may be able to count toward the \$3.5 million fund balance target, though this will need to be confirmed with King County Risk Management.

However, new needs will emerge through time, as witnessed by the 2009-2010 flood damages across the county and subsequent changes to the operations of the USACE Howard Hanson Dam.

Question 5: How has FEMA prioritized the Seawall repair? Does the city have flood insurance?

To our knowledge FEMA has not weighed in on the Seawall proposal, although the Corps of Engineers has been involved in the project. The urbanized coastline of King County is mapped as Zone X by FEMA, and the City of Seattle regulates its coastlines under its Floodplain Ordinance (SMC 25.06) as flood-prone up to the 10' elevation. Work is on-going to map coastal hazards along unincorporated shoreline of Vashon and Maury Islands. Regardless of FEMA mapping, residents and businesses are eligible for flood insurance since Seattle is a participant of good standing in the National Flood Insurance Program (NFIP). However, it should be noted that the policy limits under the NFIP are not likely to be useful for the businesses with multi-million dollar investments and inventory that far exceed the available NFIP-backed coverage. In this type of situation, as in much of the Lower Green River valley, private insurance is likely more prevalent.

Question 6: How long would projects be delayed as a result of the addition of new projects?

Projects would be delayed until 2016-2017 if additional expenditures of \$20-\$30 million are added to the capital program during the 6-year CIP.

King County Flood Control District Project Prioritization Criteria

The following prioritization scheme is intended to help prioritize KCFCD projects based on the imperative to complete each project from a flood risk/vulnerability perspective only. The basis for these criteria is the 2006 King County Flood Hazard Management Plan policies related to flood risk hierarchy (G-2) and project prioritization (PROJ-1). Sequencing of these priorities over time is guided by the application of implementation factors described and evaluated separately. (NOTE: Current land use and seriousness of impact were given relatively greater weight due to the fundamental objective of reducing risk to health, safety, and welfare.)

1) What is the current land use? (Consequences)

This criterion is intended to give different weights to different types of land uses. If more than one type of land use is at risk, select the applicable land use with the highest score. Use the score range provided to give more or less weight base 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	
Critical Facilities (See list on page 2)	11-12	12
Residential	9-10	
Commercial (Some commercial structures are critical facilities - see list)	7-8	
Agricultural (FPP land should be given higher score than non FPP lands)	5-6	
Developed Recreational (Those with regional importance should receive higher scores.)	3-4	
Undeveloped land in floodplain or Moderate CMZ	1-2	
Undeveloped land in floodway or Severe CMZ	0	
<i>Projects providing regional economic benefits receive a bonus of 5 points. A project is considered to provide regional economic benefits if it provides flood protection for a Statewide Strategic Freight Corridor category T1 or T2, high concentrations of employment as identified by the Puget Sound Regional Council (PSRC), or a Manufacturing and Industrial Center identified by the PSRC.</i>		5

2) How serious is the potential impact? (Consequences and Severity)

This criterion is intended to evaluate the nature and severity 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	
Human injury or death could result from deep fast flows or sudden changes in flood conditions. (e.g. levee or road failure.)	9-12	
Total loss of developed land use (e.g. developed land is converted to river channel.)	7-8	8
Severe flood or erosion damage that will heavily impact those affected.	5-6	
Moderate flood or erosion damage which will not likely have a long term impact on those affected.	3-4	
Flooding that interrupts human activity or will result in some clean up needs but which will results in little or no damage that will need to be repaired.	1-2	

3) How extensive will the impact be? (Consequences and Severity)

This criterion describes the scale of the problem. Is the problem manifest over a large area or in a manner that will affect a large number of people, or is it largely localized. In instance were 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.

<i>Description</i>	Score	
Regional (Impacts will be felt well outside the area in which the flooding or erosion occurred.)	7-8	8
Severe (City centers, larger neighborhood)	5-6	
Moderate (Several structures, roads et impacted)	3-4	
Localized (Affects a few homes or business)	1-2	

4) How soon will the impact occur? (Urgency)

This criterion is used to describes how soon the flood risk needs to be addressed to avoid its occurrence or reoccurrence.

<i>Description</i>	Score	
Some or all of the damages described will likely occur or recur during the next major high flow event.	5-6	6
Damages may occur during the next high water event, or the potential for them to occur is rapidly increasing.	3-4	
Damages will eventually occur, but the risk of them occurring is not increasing rapidly	1-2	

Critical Facilities Defined

The following list is intended to help understand what constitutes a "Critical Facility". This list has been compiled from the KC Critical Areas Ordinance and the International Building Code.

1. Facilities in which > 300 people congregate
2. Daycares, elementary schools and secondary schools with > 250 people
3. College and adult education facilities with > 50 people
4. Hospitals and Healthcare facilities with > 50 resident patients
5. Jails and detention facilities
6. Facilities with > 5000 occupants
7. Power, Wastewater and potable water treatment facilities
8. Fire, rescue and police facilities
9. Designated emergency shelters
10. Power generation and public utility facilities
11. Aviation facilities
12. Critical national defense facilities
13. Nursing and personal care facilities
14. Senior citizen assisted housing
15. Public roadways and bridges

16. Sites that produce, use or store hazardous substances or hazardous waste (not including sites that temporarily store household products intended of sale on the site)

Ordinance 15051 (CAO), lines 605 - 614

Critical facility: a facility necessary to protect the public health, safety and welfare including, but not limited to, a facility defined under the occupancy categories of "essential facilities," "hazardous facilities" and "special occupancy structures" in the structural forces chapter or succeeding chapter in the K.C.C. Title 16. Critical facilities also include nursing and personal care facilities, schools, senior citizen assisted housing, public roadway bridges and sites that produce, use or store hazardous substances or hazardous waste, not including the temporary storage of consumer products containing hazardous substances or hazardous waste intended for household use or for retail sale on the site.

Section 1602 International Building Code

Essential Facilities. Buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes.

DRAFT

Capital Project Description

Attachment B: City of Seattle Alaskan Way Seawall Replacement Project Proposal

Project Name: Alaskan Way Seawall Replacement Project

Location Information

Basin: Green River Water Resource Inventory Area: 9 River Mile: NA – Elliott Bay	Right Bank / Left Bank: NA Jurisdiction: City of Seattle Year Funds Requested: 2012-2014
Estimated Cost: \$600 – \$800 million	\$ 30,000,000 Total Request from FCD \$ 0 Local Share

Describe the flood, erosion, or channel migration concerns.

The Elliott Bay seawall provides protection to Seattle’s downtown waterfront from wind driven storm waves and the erosive tidal forces of Puget Sound. Continued exposure to storm waves and tidal forces as well as exposure to marine organisms has resulted in damage to the Seawall’s underlying structure which supports a surface street, public utility corridors, BNSF railroad, private utilities, and businesses along the waterfront. The Seawall was not designed to withstand earthquakes and it is predicted that the seawall has a one in ten chance of failure from an earthquake over the next ten years. If the seawall were to fail, water would flood the area behind the seawall and sections of the viaduct, Alaskan Way, adjacent structures and utilities could collapse or become unsafe. A complete collapse of the seawall could result in erosion of the shoreline approximately 70 to 140 feet landward and a threat of flooding to millions of dollars of public and private infrastructure, transportation facilities and local businesses.

Describe the action proposed to address the problem. Describe and cite any technical assessments, evaluations, and/or planning documents completed to develop the proposed action. Why was the proposed action selected from other alternatives?

The City of Seattle Department of Transportation (SDOT) is looking to replace the seawall with a long-term solution that meets seismic standards, improves habitat, and provides effective protection from flooding for the public, waterfront businesses, transportation facilities and public and private infrastructure. In March 2010, SDOT will hire a consultant experienced in innovative seawall design and construction, engineering, environmental analysis, economic analysis and public involvement to help design and permit a new seawall. There will be some overlap of the design of the seawall with the Central Waterfront design and planning process. In addition, there will be coordination with the U.S. Army Corps of Engineers Feasibility Study. Mayor McGinn has announced his intent to accelerate seawall design, permitting and construction with the goal of completing the project over the next five years instead of six years as previously scheduled.

Flood District Comprehensive Plan Policy Consistency

Under the District’s adopted comprehensive plan, the District ‘should only participate in flood hazard management projects that are consistent with or that exceed King County’s flood hazard management policies and standards.’ Describe how the proposed project meets or exceeds the policies contained in Chapter 2 of the 2006 King County Flood Hazard Management Plan.

1. Policy G-2 Flood Risks

The natural processes of flooding and channel migration become risks when human development is located within flood hazard areas. The level of risk is evaluated on a case by case basis using the predicted likelihood of flooding and channel migration and the consequences that would result if no action is taken. Flood risks, and the resulting consequences that would result if no action is taken, are

generally prioritized in the following order:

- a. Threats to public safety.
- b. Damage to public infrastructure.
- c. Impacts on the regional economy.
- d. Damage to private structures.

The Elliott Bay seawall is the spine of Seattle’s waterfront. It holds back fill that lies underneath the Alaskan Way surface street. Embedded in the fill are a number of major public and private utilities, including power for downtown and the region, sewer, water, storm water, combined sewer overflow (CSO), natural gas and telecommunications. The seawall also supports and protects the Alaskan Way Viaduct (SR99) one of only two north-south routes through Seattle carrying approximately 110,000 vehicles a day, the Colman Dock ferry terminal, with over 8,800,000 annual riders, and the Burlington Northern Santa Fe (BNSF) rail lines which serve both north/south and east/west freight movement for the nation and passenger rail service for the region. Failure of the seawall would lead to movement of the fill material held in place behind the seawall into Elliott Bay. Flooding of the inland structures would also occur. Replacement of the existing seawall exceeds the criteria set in Policy G-2.

2. Policy G-3: Comprehensive River and Flood Hazard Management

King County should provide comprehensive river and flood hazard management through the implementation of projects and programs that result in multiple benefits, including those created by meeting any or all of the following non-prioritized objectives:

- a. Effectively meet site- and reach-specific flood risk reduction needs;
- b. Achieve benefits that exceed the total cost of projects or programs, including long-term maintenance costs;
- c. Avoid the creation of new flood, channel migration or other risks that cannot be mitigated;
- d. Protect productive agricultural soils;
- e. Protect and, where possible, enhance aquatic and riparian habitat in a manner consistent with adopted salmon habitat recovery plans, and
- f. Leverage flood hazard management revenues through partnerships with other agencies and stakeholders.

The presence of the Elliott Bay seawall has altered the nearshore environment adjacent to the seawall. The sloping nature of the shoreline as well as sediment movement and recruitment has changed. Shading has increased and biodiversity has been reduced. All these factors affect native populations of fish and other aquatic organisms. The Elliott Bay shoreline serves as a migratory route for endangered salmonids. Replacement of the deteriorating seawall presents an opportunity to explore designs for improving habitat conditions along the seawall. The City is committed to incorporating habitat enhancement designs into a solution for replacing the seawall. This work will be consistent with the City of Seattle Shoreline Management Program Habitat Restoration Plan, the WRIA 9 Salmon Habitat Plan and the Puget Sound Action Agenda.

3. Policy G-10: Protecting Natural Functions and Values

King County shall protect flood storage, conveyance, and ecological values of floodplains, wetlands, and riparian corridors and, when feasible, should enhance or restore these ecological functions and values.

Flood risk reduction strategies and projects should be coordinated on a river-reach scale with the salmon habitat recovery plans.

This project will include habitat enhancements that restore riparian ecological functions and values in support of salmon habitat recovery plans.

Flood Risk Reduction Factors

Describe the current land use. What is at risk? (i.e. critical facility, residential, commercial, undeveloped land) The Seattle shoreline along the Elliott Bay seawall is an urban harborfront supporting local businesses and residential uses as well as providing recreational and tourism opportunities. This area of the shoreline also a major north-south transportation corridor supporting vital transportation facilities including the Alaskan Way surface street, the Alaskan Way Viaduct, the BNSF railroad, Washington State Ferries at Colman Dock, and the Port of Seattle cruise terminal. The Pioneer Square Historic District runs through the southern portion of the seawall and many historic buildings lie on the eastern side of the Alaskan Way. Failure of the seawall could destabilize the infrastructure tied directly to the seawall, cause a disruption in truck freight movements, cause the BNSF Railway main line to become inoperative, disrupt the operations of Coleman Dock, and damage sensitive Puget Sound ecological resources.

How serious is the potential impact? (i.e. human injury or death could result, total loss of developed land use, flood or erosion damage, minor flooding with little or no damage)

It is predicted that the seawall has a one in ten (10) chance of failure from an earthquake over the next ten (10) years. Even without an earthquake, the seawall could fail in places due to its current state of deterioration. Failure of the structure would lead to movement of the fill material held in place behind the seawall into Elliott Bay. The loss of soil behind the seawall would result in erosion of the soils and flooding of inland structures. Piers and waterfront buildings could collapse. Due to the high use of the waterfront area by pedestrians, workers and tourists, damage and/or failure of the wall poses a significant risk to human health and safety.

How extensive will the impact be? (i.e. regional, severe, moderate, localized)

Partial failure of the seawall would cause moderate impacts to local and regional businesses by impeding pedestrian, car and truck traffic as well as damaging the roadway, piers and buildings. A catastrophic collapse of the seawall could have greater local impacts as well as regional and national impacts such as: disruption of ferry and rail traffic, collapse of piers and buildings, and collapse of sewer and power infrastructure.

Urgency – How soon will the impact occur? (i.e. during the next high flow event; potential for damages is rising; damage will occur eventually but the risk is not increasing) What is the recurrence interval?

The impacts of a seawall failure could occur at any time. Due to the high use of the waterfront by Seattle residents, workers and tourists, damage and/or failure of the wall poses a risk to human health and safety. This is underscored by a recent incident in May 2009 where erosion of fill behind the seawall resulted in a section of sidewalk collapsing under a pedestrian. Due to the deterioration of the seawall resulting from its age, corrosive marine environment and marine organisms, there is great potential for a large collapse from tidal erosion and subsequent seawall failure. There is an even greater risk of failure from a seismic event.

Regional economic benefit (i.e. strategic freight corridor, Puget Sound Regional Council employment centers, etc.)

Seattle's position as a global gateway city rests largely upon the success of industries operating from the Elliott Bay waterfront. Should these industries be forced to delay or suspend operations in the wake of a seawall failure, the economic impact would be felt around the region. According to a recent Port of Seattle study, losses resulting from a seawall collapse could amount to 1702 jobs and \$79.7 million in local wages and salaries annually. On a regional scale, closure of the Alaskan Way surface street could force businesses to relocate. Shipping could be reallocated to ports such as the Port of Portland or the Port of Tacoma, or even out of the United States. Cruise lines could relocate to Vancouver B.C. losing \$32 billion worth of products. Seawall failure could also pose long-term complications for major container and international industries. In addition, damage to the BNSF rail line could amount to over \$2 million. The benefit of this project is the protection of these far-reaching local and regional economic activities from catastrophic failure of the seawall.

Implementation Factors

Readiness (i.e. status of landowner negotiations, permits, design, etc.) Preliminary replacement concepts have been developed in partnership with the Washington Department of Transportation (WSDOT) and the U.S. Army Corps of Engineers. However, design work will begin in March 2010. This project is on an aggressive schedule to begin construction by 2012. The project lies within City street rights-of-way so it is anticipated that new property acquisitions will be required. Following is the currently proposed schedule:

Schedule

2010 – 2011	Design
2012 – 2014	Construction

<p>Leveraging of external resources or funds (i.e. note any resources supporting this project and any grant applications submitted or in development) The City is working with the U.S. Army Corps of Engineers on a General Investigation Feasibility Study. However, funding has not yet been granted.</p>	
<p>Supports multiple objectives (Examples: non-point source action plan, ESA recovery plan, adopted stormwater plan, other adopted plan)</p> <p>This project supports multiple objectives:</p> <ul style="list-style-type: none"> - Protection of public safety. - Protection of public and private infrastructure. - Protection of public and private property. - Enhance/Improve aquatic habitat - Support protection of endangered species 	
<p>Extent of long-term maintenance needs</p> <p><input checked="" type="checkbox"/> Minimal (Project provides a permanent solution)</p> <p><input type="checkbox"/> Medium (Project reduces rather than removes flood risks and facility is designed to minimize O&M)</p> <p><input type="checkbox"/> High (Project will require annual maintenance</p>	<p>Community Rating System</p> <p><input type="checkbox"/> FEMA CRS rating less than 6</p> <p><input type="checkbox"/> FEMA CRS rating greater than or equal to 6</p> <p><input checked="" type="checkbox"/> Proponent does not participate in the CRS</p>
<p>Floodplain Management Regulations</p> <p><input checked="" type="checkbox"/> Meets NFIP minimum requirements</p> <p><input checked="" type="checkbox"/> Exceeds NFIP minimum requirements</p>	<p>Does proponent maintain and fund an active CIP program for flooding and/or stormwater drainage?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Does proponent maintain and fund an active operations and maintenance program for flooding and/or stormwater drainage?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Other Information or Needs</p>