

#### SEATTLE CITY COUNCIL

#### **Legislative Summary**

#### CB 118588

Record No.: CB 118588

Type: Ordinance (Ord)

Status: Passed

Version: 3

124966

LITIOU

In Control: City Clerk

File Created: 11/10/2015

Final Action: 12/17/2015

Title: AN ORDINANCE relating to Seattle Public Utilities; authorizing the Director of Seattle Public Utilities to enter into a Joint Project Agreement with King County to design, construct, operate, and maintain the Ship Canal Water Quality Project, in partial fulfillment of the objectives of the Consent Decree authorized under Ordinances 123908 and 124129, and the "Plan to Protect Seattle's Waterways" authorized under Ordinance 124766, to reduce Combined Sewer Overflows; and ratifying and confirming certain prior acts.

<u>Date</u>

Notes:

Filed with City Clerk:

12/17/2015

Mayor's Signature:

12/17/2015

Sponsors: Bagshaw

Vetoed by Mayor: Veto Overridden:

Veto Sustained:

Attachments: Att 1 Ex A - Project Description, Att 1 Ex B - Change Management, Att 1 Ex C - One Team

Decision Making Guidelines, Att 1 Ex D - List of Potential Causes for Capital Cost Increases, Att

1 Ex E - DNRP-WTD Invoice Format, Att 2 - SCWQP System Illustration

Drafter: bob.hennessey@seattle.gov

Filing Requirements/Dept Action:

Histo	ory of Legislat	tive File	Le	gal Notice Published	: Yes	□ No .	
Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Mayor	11/24/2015	Mayor's leg transmitted to Council	City Clerk		,	
	Action Text: Notes:	The Council Bill (CB) wa	is Mayor's leg transm	tted to Council. to the C	ity Clerk		
1	City Clerk	11/24/2015	sent for review	Council President's Office			
	Action Text:	The Council Bill (CB) wa	s sent for review. to t	he Council President's C	Office		

1 Council President's Office

11/24/2015 sent for review

Seattle Public Utilities and Neighborhoods Committee

Action Text:

The Council Bill (CB) was sent for review, to the Seattle Public Utilities and Neighborhoods Committee

Notes:

1 Full Council

11/30/2015 referred

Seattle Public Utilities and Neighborhoods Committee

Action Text:

The Council Bill (CB) was referred. to the Seattle Public Utilities and Neighborhoods Committee

Notes:

1 Seattle Public Utilities and

12/08/2015 pass as amended

Pass

Neighborhoods Committee

Action Text:

The Committee recommends that Full Council pass as amended the Council Bill (CB).

In Favor: 1

Chair Bagshaw

Opposed: 0

Absent(NV): 1

Member Harrell

2 Full Council

12/14/2015 passed as amended

Pass

Action Text:

The Council Bill (CB) was passed as amended by the following vote and the President signed the Bill:

Notes: ACTION 1:

Motion was made by councilmember Burgess and duly seconded to amend

ACTION 2:

In Favor: 7

Council President Burgess, Councilmember Godden, Councilmember

González, Councilmember Harrell, Councilmember Licata,

Councilmember O'Brien, Councilmember Sawant

Opposed: 0

Absent(NV): 1

Councilmember Rasmussen

3 City Clerk

12/16/2015 submitted for

Mayor

Action Text:

Mayor's signature
The Council Bill (CB) was submitted for Mayor's signature. to the Mayor

Notes:

Mayor

12/17/2015 Signed

Action Text:

The Council Bill (CB) was Signed.

Notes:

3 Mayor

12/17/2015 returned

City Clerk

Action Text:

The Council Bill (CB) was returned, to the City Clerk

Notes:

City Clerk

12/17/2015 attested by City

Clerk

Action Text:

The Ordinance (Ord) was attested by City Clerk.

Notes:

1.

CITY OF SEATTLE

ORDINANCE

COUNCIL BILL 11858

AN ORDINANCE relating to Seattle Public Utilities; authorizing the Director of Seattle Public Utilities to enter into a Joint Project Agreement with King County to design, construct, operate, and maintain the Ship Canal Water Quality Project, in partial fulfillment of the objectives of the Consent Decree authorized under Ordinances 123908 and 124129, and the "Plan to Protect Seattle's Waterways" authorized under Ordinance 124766, to reduce Combined Sewer Overflows; and ratifying and confirming certain prior acts.

WHEREAS, the City of Seattle and King County own and operate their own combined sewer systems, portions of which are interconnected and that in some locations are at risk of overflows during heavy rain events; and

. 

WHEREAS, the combined sewer system overflows (CSOs) are regulated under the federal Clean

Water Act and governed by the State of Washington under the terms of National

Pollutant Discharge Elimination System (NPDES) permits separately issued to both the

City of Seattle and King County; and

WHEREAS, the terms of the NPDES permits require the City of Seattle and King County to limit untreated overflows at each CSO outfall to an average of no more than one per year; and

WHEREAS, under a Consent Decree with the U.S. Environmental Protection Agency (EPA), the Washington Department of Ecology (Ecology), and the U.S. Department of Justice (DOJ) authorized by Ordinance 123908 and amended by Ordinance 124129, the City of Seattle must implement control measures to limit untreated combined sewer overflows in accordance with State of Washington requirements by December 31, 2025; and

1 .	WHEREAS, under a separate Consent Decree with EPA, Ecology, and DOJ, King County must
2	control its combined sewer overflows, including its 3 <sup>rd</sup> Ave. W outfall by December 2023
3	and 11 <sup>th</sup> Ave. NW outfall by 2030; and
4	WHEREAS, the Consent Decrees of both the City and King County contain a "Joint Operations
5	and System Optimization Plan between the City of Seattle and King County," ("Joint
6	Plan"), which provides that CSO facilities be identified that may be beneficial to jointly
7	operate and/or monitor; and
8	WHEREAS, the City of Seattle and King County have identified and evaluated a joint Ship
9	Canal Water Quality Project to control combined sewer overflows from their respective
10	outfalls 147, 174, 150, 151, 152, and 3 <sup>rd</sup> Ave. W (008), and 11 <sup>th</sup> Ave. NW (004); and
11.	WHEREAS, the City of Seattle is required to construct a Shared West Ship Canal Tunnel (aka
12	Ship Canal Water Quality Project) for outfalls 147, 174, 150, 151, and 152 by its EPA
13	and Ecology approved "Plan to Protect Seattle's Waterways" (Long-Term Control Plan
14	and Integrated Plan); and
1:5°	WHEREAS, King County has a 2012 CSO Long Term Control Plan Amendment approved by
16	state and federal regulators identifying independent options to control overflows at its 3rd
17	Ave. W Outfall (008) and 11 <sup>th</sup> Ave. NW outfall (004), and King County is seeking
18.	approval from EPA and Ecology to a modified schedule for completion of its 3 <sup>rd</sup> Ave W
19	CSO control project and a change in the project description for the 11 <sup>th</sup> Ave NW CSO
20	project, consistent with the joint Ship Canal Water Quality Project; and
21	WHEREAS, Seattle Public Utilities will be the lead agency and will construct, own, and operate
22	the completed and commissioned Ship Canal Water Quality Project, and will work with

King County in accordance with the Joint Plan in the design, construction, commissioning, operation and maintenance of the project facilities; and

WHEREAS, Seattle Public Utilities and King County have agreed to share the costs of the Ship Canal Water Quality Project, including but not limited to costs for project planning, design, land acquisition, permitting, construction, mitigation required by SEPA, commissioning, operation, maintenance, repairs, replacements, alterations, improvements, monitoring and modeling, and one percent for the arts, with Seattle Public Utilities paying 65 percent and King County paying 35 percent of the costs of the joint Ship Canal Water Quality Project, subject to change if the Parties mutually agree to modify the Project; NOW, THEREFORE,

#### BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. The Director of Seattle Public Utilities is authorized to execute a Joint Project Agreement with the King County Department of Natural Resources and Parks, substantially in the form as attached hereto as Attachments 1 and 2, to design, construct, operate, and maintain the Joint Ship Canal Water Quality Project, in partial fulfillment of the objectives of the City's Consent Decree and Plan to Protect Seattle's Waterways, to reduce Combined Sewer Overflows.

Section 2. The Director of Seattle Public Utilities will prepare and submit to the Seattle Public Utilities and Neighborhoods Committee, or the appropriate Council committee, a semi-annual written progress report focusing on the Ship Canal Water Quality Project. The written report will include a narrative identifying work completed to date, upcoming project milestones, a project schedule assessment, and a cost update for the City's and King County's portions of the project.

Section 3. Any act consistent with the authority of this ordinance taken after its passage 1 2 and prior to its effective date is ratified and confirmed. Section 4. This ordinance shall take effect and be in force 30 days after its approval by the 3 Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall 4 take effect as provided by Seattle Municipal Code Section 1.04.020. 5 Passed by the City Council the 4 day of 6 7 signed by me in open session in authentication of its passage this 14th day of Dec. 8 9 of the City Council President 10 11 Approved by me this  $\frac{17}{12}$  day of  $\frac{1}{12}$  day of  $\frac{1}{12$ 12 13 14 Edward B. Murray, Mayor 15 16 Filed by me this 17 day of December. 17 18 19 Monica Martinez Simmons, City Clerk 20 21 (Seal) 22 23 24

	Ed Mirabella
	SPU Ship Canal Water Quality Project JPA ORD D3a
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1	Attachments:
2	Attachment 1 – City of Seattle and King County Ship Canal Water Quality Joint Project
3	Agreement
4	Exhibit A – SPU/DNRP Ship Canal Water Quality Project – Project Description
5	Exhibit B – SPU/DNRP Ship Canal Water Quality Project – Change Management
6	Exhibit C – SPU/DNRP Ship Canal Water Quality Project – One Team Decision Making
7	Guidelines
8	Exhibit D – SPU/DNRP Ship Canal Water Quality Project – List of Potential Causes for
9	Capital Cost Increases
10	Exhibit E – DNRP-WTD Invoice Format
11	Attachment 2 – SCWQP (Ship Canal Water Quality Project) System Illustration
12	
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#### **Exhibit A**

## SPU/DNRP Ship Canal Water Quality Project Project Description

October 28, 2015

#### **Project Purpose**

The purpose of The Ship Canal Water Quality (WQ) Project is to provide offline storage of combined sewer overflows (CSOs) for five Seattle Public Utilities (SPU) and two King County Department of Natural Resources and Parks (DNRP) CSO basins to meet regulatory control standards which limits CSOs to an average of no more than one untreated discharge per year per outfall on a twenty year moving average. The specific basins, and CSO to be controlled by the project, include the SPU Ballard CSO basins (Outfalls 150, 151, and 152), Fremont CSO basin (Outfall 174) and Wallingford CSO basins (Outfall 147), DNRP 3rd Avenue West Regulator (DSN008), and DNRP 11th Avenue NW Regulator (DSN004). The total minimum control volume to be achieved for these SPU and DNRP CSO basins combined is 15.24 million gallons (MG). The facility must also meet water quality standards and protection of designated uses, and must be verified by post construction monitoring (frequency of overflow and sediment sampling).

#### **Project Scope**

The Ship Canal WQ Project will provide offline storage of combined wastewater in a deep storage tunnel constructed between the Ballard and Wallingford CSO areas, on the north side of the Ship Canal. The Project will control the Ballard CSO basins (Outfalls 150,151 and 152), Fremont (Outfall 174) and Wallingford CSO basins (Outfall 147), DNRP 3rd Avenue West Regulator (DSN008), and 11th Avenue NW Regulator (DSN004). Figure 1 provides a plan view of the Ship Canal WQ Project location and components.

The main components of The Ship Canal WQ Project include the storage tunnel and appurtenances, conveyance facilities to convey SPU and DNRP CSO flows into the tunnel, and a pump station and force main to drain flows from the tunnel.

The storage tunnel and appurtenances will include:

- A minimum 15.24-MG offline storage tunnel with a nominal 14-foot inside diameter and approximately 14,000 feet long or as defined during the design phase of the project.
  - The stored combined sewage in the storage tunnel will flow from the Wallingford CSO Outfalls westward to an effluent pump station located near the Ballard CSO Outfalls 150 and 151.
  - The tunnel route is planned to be generally in street right-of-way along the north side of the Ship Canal.
- Seven diversion structures for diverting influent CSO flow away from existing CSO outfalls to the tunnel.

- Four drop structures to convey influent CSO flow into the storage tunnel.
- All four drop structures will have odor control.
- A pump station will be located at the West tunnel Portal as defined during the design phase of the project, with a minimum peak capacity of 32 MGD to empty the storage tunnel in approximately 12 hours.

#### Conveyance facilities will include:

- Gravity sewer line to convey flows from SPUs diversion structure at Fremont Outfall 174 to the tunnel drop shaft (approximately 100 lineal feet (If) of 36-inch diameter pipe);
- Gravity sewer line to convey flows from DNRPs diversion structure at 3<sup>rd</sup> Ave. W (under the Ship Canal) to the tunnel drop shaft (approximately 800 If of 60 and 48-inch diameter pipe);
- Gravity sewer line to convey flows from DNRPs diversion structure at 11<sup>th</sup> Ave. NW to the tunnel drop shaft (approximately 100 If of 72 and 60-inch diameter pipe);
- Force main to convey flows from the tunnel pump station to DNRPs existing Ballard Siphon wetweather barrel forebay (approximately 1900 If of 24-inch diameter pipe).

All conveyance sizing and quantities are estimates based on conceptual planning to date. Actual diameters and lengths of conveyance facilities will be determined during the design phase of the project.

Gravity sewer lines to convey flows from SPUs diversion structures at Ballard outfalls 150, 151 and 152, and Wallingford outfall 147 to the tunnel drop shafts have been excluded from The Ship Canal WQ Project in accordance with the Joint King County/Seattle CSO Initiative Work Plan Item 4: Cost-Sharing Method for Joint Capital Projects.

The control strategy will limit the inflow to the tunnel from each outfall to each outfall's control volume per event. The minimum control volume for each outfall is:

#### SPU Outfalls

• Fremont (Outfall 174): 1.06 MG

Wallingford (Outfall 147): 2.15 MG

Ballard (Outfall 152): 5.38 MG

Ballard (Outfall 150/151): 0.62 MG

#### **DNRP Outfalls**

3rd Avenue West (DSN008): 4.18 MG

11th Avenue Northwest (DSN004): 1.85 MG

Each agency has calculated the control volumes required to meet their independent needs. Although calculation methods vary between the agencies, SPU and DNRP agree that these are the minimum volumes to be controlled to and provided for by The Ship Canal WQ Project.

SPU will own and operate the tunnel components listed below, and all new structures and pipes appended to each existing DNRP outfall pipe. Ownership of outfall pipes will remain unchanged. The Ship Canal WQ Project tunnel components include:

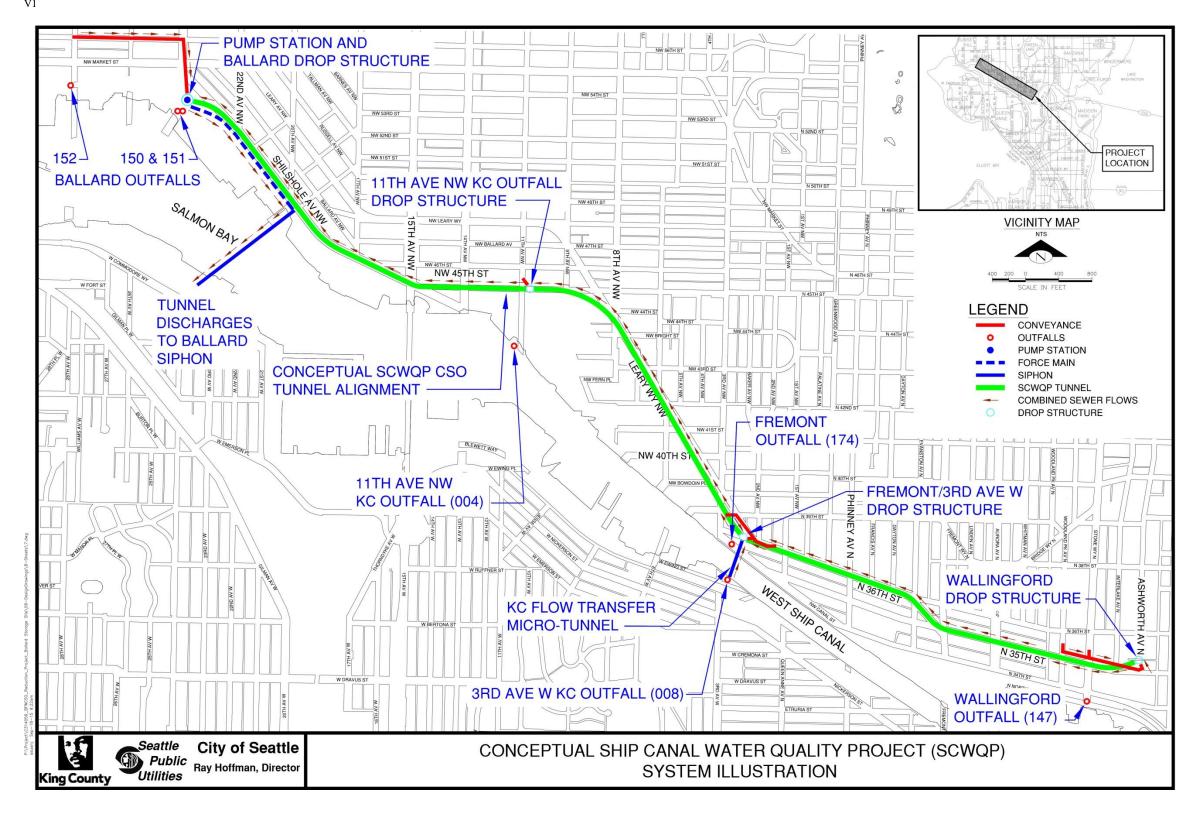
- The tunnel in its entirety, including the East and West Portals;
- The pump station and force main;
- All diversion structures, including DNRP's 3rd Avenue West and 11th Ave NW structures, SPU diversion structures for Ballard outfalls 150,151 and 152, Fremont outfall 174 and Wallingford outfall 147;
- All of the conveyance system associated with SPU's outfalls and downstream of the 3rd Avenue
   West and 11th Ave NW diversion structures;
- All control gates and associated structures and control systems;
- All odor control systems;
- All appurtenances associated with the above; and
- All real property associated with the Project

Any changes to this project scope need to be negotiated and agreed to by both SPU and DNRP through the Change Management process, attached to the Joint Project Agreement as Exhibit B.

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Figure 1: Ship Canal WQ Project Plan







#### **Project Capital Cost Estimate**

Total project capital costs for the Ship Canal Water Quality (WQ) Project are estimated at \$423.4 million. This estimate is from SPU's Final Project Definition Report Volume 1, December 2014, with sales tax and escalation adjustments. The estimate includes exclusions from cost sharing described above and is escalated to the mid-point of construction assuming 2% escalation. The estimate is AACE Class 4, which has level of accuracy of minus 20%, plus 30% (\$338.7 to \$550.4 million cost range).

#### **Project Schedule Summary**

The compliance schedule for the Ship Canal WQ Project (per the City's approved Plan to Protect Seattle's Waterways) is summarized below. A detailed project schedule shall be included in the Project Management Plan.

Task	<b>Compliance Date</b>
Submit Draft Engineering Report (Facility Plan) for review and comment	3/31/2017
Submit Final Engineering Report (Facility Plan) for approval	12/31/2017
Submit Draft Plans and Specifications for review	3/31/2020
Submit Final Plans and Specifications for approval	12/31/2020
Construction Start (notice to proceed)	7/1/2021
Construction Completion	12/31/2025
Achieve Controlled Status	12/31/2026

#### **Signatures**

Madeline Goddard, P.E.	Deputy Director, Drainage and Wastewater Line of Business, Seattle Public Utilities  Date:
Henry Chen, P.E.	Deputy Director, Project Delivery and Engineering Branch, Seattle Public Utilities Date:
Pam Elardo, P.E.	Director, King County Wastewater Treatment Division
	Date:





#### **Exhibit B**

## SPU/DNRP Ship Canal Water Quality Project CHANGE MANAGEMENT

October 28, 2015

#### **Background**

SPU and DNRP are committed to work together to implement the Joint Ship Canal Water Quality Project (Project), to control both agencies' CSOs into the Ship Canal. The Project is under a Consent Decree mandated schedule (both agencies have separate consent decree schedules that this project must comply with,) and like many large scale municipal projects, is expected to be technically challenging and complex. The Project must meet all required milestones as it progresses through design and construction. Potential cost increases are to be managed and/or avoided and require management oversight, review and guidance through project design and construction.

To address the potential risks to the project, a Change Management process with a Project Review and Change Management Committee (PRCMC) is established through this document and the Joint Project Agreement (JPA) to provide senior level management oversight, support, and direction to the project. The PRCMC will focus on project issues that can affect project scope, schedule and/or budget, and serve as the forum to discuss major issues and concerns as they arise and make recommendations to keep the project on schedule and within budget. The PRCMC will provide support and guidance throughout the project design, construction phases. Decisions will be made by consensus of the Committee. If consensus cannot be reached, the decision will be elevated to follow Paragraph 12 of the One Team Decision Making Guidelines (Exhibit C).

In addition, the PRCMC will provide support and guidance throughout the project commissioning, operations and maintenance. Changes to the final Operations and Maintenance Plan are to be managed and require management oversight, review and guidance. Decisions will be made by consensus of the Committee. If consensus cannot be reached, the decision will be elevated to follow Paragraph 12 of the One Team Decision Making Guidelines (Exhibit C).

If the Parties agree to change the project scope beyond the Project Description, then the joint project cost shares and the costs to which those shares apply will be revised. The cost shares will be recalculated in accordance with Technical Memorandum No. 4 to include additional avoided independent project, if applicable. These modified cost shares will then be used to assign costs to the Parties for both the larger Ship Canal Project and any consequently modified CSO control project in other basins.

### **Project Review and Change Management Committee Objectives and Membership**

SPU is responsible for the implementation of PRCMC decisions for the Project. However both agencies' compliance with their approved mandated Consent Decrees, NPDES Permits and Post

Construction Monitoring Plans are dependent in part on the Project's success in controlling CSOs. SPU will use the PRCMC to leverage the experiences, expertise, and insights of the committee members to effectively progress the Project. The PRCMC will be responsible for the following:

- Understand the commitments inherent in the Project Description and the Joint Project Agreement. Provide the bigger picture and look-ahead view;
- Reach agreement on what the required goals of the Project are versus the desired goals,
- Maintain an awareness of risks through regular project briefings;
- Engage in high level problem solving to ensure effective management of project risks,
- Monitor and conduct formal reviews of project scope, costs, schedules, refinements and adjustments during project design through construction;
- Meet every other month or more frequently as determined by the PRCMC or requested by the Project team to provide management-level oversight by both SPU and DNRP,
- · Review status reports and monitor project progress;
- Review and validate prior to SPU's formal Stage Gates 2 (preferred option, funding for design, placeholder for total cost projection and O&M), Stage Gate 3 (final design plans, contract specifications and engineer's estimate of construction costs) and Stage Gate 5 (project close out) to ensure approved project objectives, as documented in the Project Description, are met or that new/modified objectives are justified and documented;
- Make decisions and provide direction to the Project team on course of action for key project elements;
- Make decisions on contract changes as defined in Table B-1, Table B-2 and Table B-3, attached;
- Authorize Project Description and budget changes.

PRCMC meetings will be structured to fully inform the committee members and provide up to date status reports on the following:

- Cost and schedule;
- Understanding of the risks identified for the Project, and the cost and schedule implications
  of the risks;
- Permitting challenges that affect project scope, schedule or budget;
- Alternatives analysis, and approach for on-going success of the project;
- Analysis of consultant and construction contract changes essential for project delivery as defined in the Project Description, Exhibit A; and
- The plan for stakeholder involvement, stakeholder input and expectations, and proposed strategy to respond to stakeholder expectations.

#### **Meetings**

Meetings will be scheduled by SPU as the lead agency. The SPU Project Delivery and Engineering Deputy Director will chair the PRCMC. The WTD Division Director will attend the meetings and the SPU Project Administrator will staff the meetings. Meeting agendas will be provided at least two days in advance of all meetings. Minutes will be taken and retained on an accessible site for all committee members using either dedicated project or SharePoint. An electronic "Direction and Action Log" will be developed, maintained and retained on an accessible site for reference by the project team and the PRCMC members.

#### **PRCMC Membership**

The PRCMC shall be composed of SPU and DNRP management with specific areas of expertise and experience considering the nature of the project and its potential challenges. The PRCMC Chair ensures the board fulfills its role. The Project Administrator organizes, schedules and staffs the meetings, develops agendas, coordinates with PRCMC Chairand DNRP's Project Representative on agenda items, materials and presentations as they are needed for the PRCRC meetings; records and maintains records for the PRCMC proceedings. Committee members will bring their experience and expertise to bear on the review, analysis and decisions made and directions given by the PRCMC.

The PRCMC members include the following:

- DNRP WTD Director
- DNRP WTD Project Planning & Delivery Section Manager
- DNRP WTD Engineering Unit Manager
- DNRP WTD Construction Unit Manager
- DNRP WTD Plant Operations Manager
- DNRP WTD Assistant Plant Manager
- SPU DWW LOB Deputy Director
- SPU Project Delivery and Engineering Branch Deputy Director (Chair)
- SPU Construction Management Director
- SPU Engineering Director
- SPU Systems Operation Assessment and Monitoring Division Director
- SPU Utility Operations and Maintenance Division Director
- SPU Systems Operation Planning and Analysis Manager
- SPU Utility Operations Manager

Participation by the members is dependent upon the phase of the Project and the PRCMC agenda. Project team subject matter experts will be requested to attend the meetings on an as-needed basis.





Table B-1. Required Approvals for Consultant Contract Amendments					
Type of Change	Required Approval	Dollar Threshold	Aggregate Overall PROJECT Schedule Extension Threshold**	Reporting	Notes
	SPU PM SPU Division Director	(Less than \$250K) Per SPU change management policies and procedures	Up to 2 months impact on the required Project delivery date in the JPA	Reporting to PRCMC	
Amendment required to deliver per JPA project description (Scope, Schedule and Budget) and is within consultant contract scope	Approval by both PDEB and LOB Directors and concurrence of WTD PPD Section Manager	For changes exceeding \$250K but under \$500K	Up to 4 months impact on the required Project delivery date in the JPA	changes (cost or schedule) on the monthly basis and at 30/60/90	Changes essential for project delivery as defined in the baseline project description
	Approval by both SPU PDEB,LOB and concurrence of WTD Deputy Directors	For changes exceeding \$500K but under \$1M	Up to 6 months impact on the required Project delivery date in the JPA	submittals.	

	Approval by SPU	All changes that are		
Any change to the project	Director and	outside the JPA	Greater than 6 months	Financial
description and Amendments	concurrence of	project description.	impact on the required	participation will be
exceeding \$1M	DNRP Director or		Project delivery date	per the cost sharing
exceeding \$ fivi	Delegated to	All changes above	in the JPA	agreement
	PRCMC	\$1M		





Table B-2 Required Review and Approval Responsibility for Construction Contract Changes Per Individual Contract GREATER THAN \$10M				
Construction Contract Change Threshold	Approval Level			
Change requiring usage of budgeted project contingency reserve up to \$500,000	Follows SPU project approval authority matrix			
Change requiring usage of budgeted project contingency reserve over \$500,000	Follows SPU project approval authority matrix and WTD PPD Section Manager			
Changes requiring usage of budgeted management reserve and aggregate changes of <\$500,000	SPU Project Manager/ Construction Manager/Director			
Changes requiring usage of budgeted management reserve and between \$500K - \$1M	SPU Project Delivery and Engineering Director with WTD PPD Section Manager			
Changes requiring usage of budgeted management reserve and between \$1M - \$2M or >10% and <15% of contract award amount	Project Review and Change Management Committee (PRCMC)			
Changes requiring usage of budgeted management reserves > \$2M or >15% of contract award amount	SPU and DNRP Division Level Directors			
Changes desired by stakeholders but not included in JPA project description < \$2 M	Project Review and Change Management Committee (PRCMC)			
Changes desired by stakeholders but not included in JPA project description > \$2 M	SPU and DNRP Department Level Directors			



project description > \$1 M



#### Table B-3 **Required Review and Approval Responsibility for** Construction Contract Changes Per Individual Contract LESS THAN \$10M **Construction Contract Change Threshold** Approval Level Change requiring usage of budgeted project contingency Follows SPU project approval authority matrix reserve up to \$250,000 Follows SPU project approval authority matrix and Change requiring usage of budgeted project contingency reserve over \$250,000 WTD PPD Section Manager Changes requiring usage of budgeted management SPU Project Manager/ Construction Manager/Director reserve and aggregate changes of <\$250,000 Changes requiring usage of budgeted management SPU Project Delivery and Engineering Director with reserve and between \$250K - \$500K WTD PPD Section Manager Changes requiring usage of budgeted management Project Review and Change Management Committee reserve and between \$500K - \$1M or >10% and <15% of (PRCMC) contract award amount SPU and DNRP Division Level Directors Changes requiring usage of budgeted management reserves > \$1M or >15% of contract award amount Changes desired by stakeholders but not included in JPA Project Review and Change Management Committee project description < \$1 M (PRCMC) SPU and DNRP Department Level Directors Changes desired by stakeholders but not included in JPA

- Project Contingency Reserves: The amount of funds allocated to the project to cover identified risk events identified in the risk register that occur on the project, excluding changes to project scope.
- Project Management Reserves: The amount of funds allocated to the project to cover unidentified and unquantifiable risk events that occur on the project.
- Project Reserve: Sum of Project Contingency Reserves and Project Management Reserves. Project Reserves are part of the cost estimate and approved project budget.
- Project will have major milestones: Submission of Draft Facility Plan for review, Submission of Final Facility Plan for Approval, Submission of Draft Plans and Specifications for Review (90%), Submission of Final Plans and Specification for Approval (100%),. Construction start (Notice to Proceed) and Construction Completion are SPUs Consent Decree/LTCP milestone requirements. Any delay to any of the milestones is subject to the Change Management process.

The project reserve threshold levels may be revised upon mutual written agreement of the Parties, executed by the Department Directors or their designees.





#### **Exhibit C**

# SPU/DNRP Ship Canal Water Quality Project One Team Decision Making Guidelines October 28, 2015

- 1. The Ship Canal WQ Project Team is empowered and encouraged to make relevant decisions to carry out projects in a way that is efficient, adds value, and maximizes the prospects of a successful project. However, there are boundaries to the Team's authority. The Team is responsible for understanding project assignment, including its purpose, scope, schedule and budget; and for seeking timely approval by governance decision-makers for changes that exceed authorized levels.
- 2. At each stage of the Project the active members of the Team at the time, should be solicited for their point of view. It is the responsibility of the Team lead and other members of the Team to listen to the other's view and consider it in the context of each decision being made and with the ultimate goal of achieving the best outcome for the Project, SPU and DNRP.
- 3. A deliberate transistion meeting should occur whenever the Lead for the Project changes from planning to design to construction to commissioning to operations and maintenance to help ensure that the members of the Project Review and Change Management Committee understand the issues and risks.
- 4. If a particular member has an opinion about something that strictly resides in their area of expertise or concern and does not significantly affect the interests of the other members, <u>and</u> it is not inconsistent with asset management guidelines or standards, the Team should give some amount of deference to that particular member on that topic. For example, if the operator has a preference for equipment that does not affect NPV, schedule, project functionality, environmental impact, department standards, or community expectations, then they would normally be the one to make that decision. Another example might be Project Delivery and Engineering Branch (PDEB) deciding between DBB and GCCM project delivery methods. However, if a Team member wants to pursue an option for their personal preference, but the option would affect the NPV or impair the functionality or operability of the Project, they should not normally be deferred to.
- 5. While each Team member is expected to pay particular attention to the interests that they have selected to represent in the process, they should at the same time temper that by also considering what is best from an overall project or customers' interest. It is expected that any Team member should speak up and raise concerns within the Team about proposed project decisions or changes that, in the view of that Team member, may negatively affect scope, schedule or budget, or potentially undermine project success.
- 6. Previous decisions should not be revisited unless there is compelling new information. A modification of a Team's membership is usually not a sufficient reason to revisit a previous decision. New members to the Team should be brought up to speed by the current Team lead (or someone designated by the lead) at the stage they begin engaging with the Project Team.
- 7. If choices can be easily and clearly analyzed by asset management techniques, then these should be used to make a decision.
- 8. The Team should work hard and creatively to openly discuss and propose alternatives in order to

- find the best solution or reach the best decision that can achieve as many project objectives as possible. This is an obligation of all Team members, but especially that of the current lead which, at the particular phase, is most responsible for keeping the Project and Team moving forward.
- 9. The Team should strive for general agreement and clear commitment among Team members when making decisions. That is to say that each of the Team's members should at least be able to <u>live</u> with the decision that is being proposed, even if it is not their preferred outcome. Silence is your concurrence. It is also worth considering including other mitigating aspects of a decision that can move Team members from the most grudging acceptance to more enthusiastic support.
- 10. Notes should always be taken and decisions will be documented in a Decision Log.
- 11. All Team members are responsible for supporting Team decisions in word and action.
- 12. If general agreement among members is not possible, then the Lead is responsible for making a final decision (including any compromise aspect). This action will be the direction of the Team, subject to #13, below.
- 13. If a member cannot live with the direction of the Team; the following "appeal" process should be used:
  - The member should notify the Team and/or Team leader (Project Administrator) of their lack of agreement/support and will seek further guidance with his/her division management.
  - The member should promptly talk to the following First Level Decision Makers:

Project Phase	SPU	DNRP
Planning or Design	Engineering Director	WTD Engineering Unit
		Manager
Construction	Construction Management	WTD Construction Unit
	Director	Manager
Commissioning	Systems Operation, and	WTD Assistant Plant Manager
	Planning Analysis Manager	
Operations and Maintenance	Utility Operations Manager	WTD Assistant Plant Manager

Team members will present issues of concern in order of presidence, to the First Level Decision Makers to determine whether or not to take the dispute forward with their counterpart for resolution.

- If First Level Decision Makers choose not to pursue the issues of concern, then this is the end of the "appeal" and the Team direction stands;
- If First Level Decision Makers choose to address the issues of concern with their counterpart, and agreement is made, their decision is final; or
- If First Level Decision Makers choose to address the issues of concern with their counterpart, and no decision is made, then the issue must be promptly elevated to the Second Level Decision Makers.
- Elevate the issues of concern to the following Second Level Decision Makers:

Project Phase	SPU	DNRP
Planning, Design or	Project Delivery and Engineering	WTD Project Planning and
Construction	Branch Deputy Director	Delivery Section Manager
Commissioning	Systems Assessment Operations and	WTD Plant Operations
	Maintenance Division Director	Manager
Operations and	Utility Operations and Maintenance	WTD Plant Operations
Mainteance	Division Director	Manager

- o If agreement is made by the Second Level Decision Makers, their decision is final;
- If no decision is made, then the issue must be promptly elevated to the SPU DWW LOB Deputy Director and WTD Director; their decision is final.





#### **Exhibit D**

## **SPU/DNRP Ship Canal Water Quality Project List of Potential Causes for Capital Cost Increases**

#### October 28, 2015

The following table provides guidance regarding agency responsibility for costs that exceed the total Project budget as defined in the Joint Project Agreement and subsequent agreed upon revisions to the total Project cost.

	Potential Causes for Capital Cost Increases	Financia	Financially Responsible Agency		
		Lead	Shared	Partner	
		Agency		Agency	
1.	Project delays caused by delays in obtaining land use and development permits.	Х			
2.	Project delays caused by delays in obtaining environmental permits.	To be jointly determined by both Agencies.		ned by both	
3.	Unanticipated permit conditions once permits are issued.		Х		
4.	Higher than estimated street-use fees by the City.		X		
5.	Unanticipated environmental mitigation costs.		X		
6.	Unanticipated changes to design and construction policies and codes.		Х		
	(e.g. changes to green building or sustainability requirements, or equity and social justice policies)				
	(Shared, unless applicable to only one agency)				
7.	Project delays caused by delays in acquiring needed sites.	Х			
8.	Project cost increases due to higher than estimated site acquisition costs.		Х		
9.	Unanticipated demands by local utility managers/owners.		Х		
10.	Unanticipated demands by local property owners.		Х		
11.	Unknown existing utility conflicts.		Х		
12.	Discovery of contaminated groundwater or soils on the		Х		

Potential Causes for Capital Cost Increases		Financially Responsible Agency		
		Lead Agency	Shared	Partner Agency
	construction site and resultant investigation and clean-up.			
13.	Discovery and removal of hazardous waste.		X	
14.	Unanticipated costs as a result of archaeological discoveries.		Х	
15.	Unanticipated geotechnical considerations (seismic, boulders, groundwater, unstable soils, liquefaction, etc.) Depends on professional services compliance with industry defined 'standard of care'/ condition on appropriate construction management within industry standard/not within industry standard.	To be jointly determined by both Agencies.		
16.	Higher than anticipated requirements for storm water or dewatering treatment and disposal during construction		X	
17.	Chosen site requires extension of conveyance pipelines and outfall over assumed planning level estimates. Based on percentage.		Х	
18.	Chosen site or alignment results in unanticipated costs for demolition of existing structures, property acquisition and relocation.		Х	
19.	Changed market conditions for labor, materials and equipment and other factors of construction such as fuel cost.		Х	
20.	Changed bidding climate.		Х	
21.	Project delays and increased costs caused by bid protests.	To be jointly determined by both Agencies. (Example: If protest is due to lead agency not complying with all procurement requirements, then lead agency is responsible. If protest is found to be frivolous then agencies may share cost.		
22.	Project delays associated with material and equipment unavailability (not including sole sourced materials and equipment).		Х	
23.	Higher than estimated material and equipment costs due to inflation.		Х	

Potential Causes for Capital Cost Increases		Financially Responsible Agency		
		Lead Agency	Shared	Partner Agency
24.	Project cost increases caused by delays in obtaining <b>lead agency</b> sole source materials and equipment.	X		
25.	Project cost increases caused by delays in obtaining <b>partner agency</b> sole source materials and equipment.			х
26.	Project cost increases caused by <b>partner agency</b> delay in providing concurrence on use of project contingency reserve per Table B-2 and Table B-3 of Exhibit B.			Х
27.	Unanticipated sales tax increases.		X	
28.	Overrun due to changes that resulted from reliance on data provided by either jurisdiction proved to be inaccurate.	To be jointly determined by both Agencies based on who's Agency provided the information found to be in error.		
29.	Compressed design schedule requires additional internal and consultant staff after baseline schedule and budget are set.	To be jointly determined by both Agencies.		
30.	Increased oversight of high profile projects requires additional staff time to manage. Based on who requests, if only one agency requires then not shared (Example: Added third party oversight).	To be jointly determined by both Agencies.		
31.	Construction claims – basis of the claim used to determine.	To be jointly determined by both Agencies.		
32.	Correction of construction defects.		X	
33.	Correction of design errors and omissions.		X	
34.	Failure to achieve start-up and commissioning of project within agreed budget and time frame.	To be jointly determined by both Agencies.		
35.	Labor issues such as strikes.		X	
36.	Project delays caused by force majeure delays.		Х	
37.	Legal costs.	To be jointly determined by both Agencies.		

#### Exhibit E DNRP-WTD Invoice Format October 28, 2015

SPU will provide DNRP with a progress report on work completed on The Ship Canal WQ Project to-date, along with a cost report that includes costs to date for the items identified below. SPU will submit the cost report with each monthly invoice.

WTD Cost Template	Costs
CONSTRUCTION	
Construction Contracting	
Mitigation Construction Contracts	
Owner Furnished Equipment	
Outside Agency Construction	
Other Capital Charges	
NON-CONSTRUCTION	
Engineering Services	
Planning & Management Services	
Permitting & Other Agency Support	
Right-of-Way	
Land Purchases/Easements	
Local Agency Mitigation	
Misc. Service & Materials	
Internal Staff Labor (need to understand their Org Structure to identify	
categories)	
Overhead (Need to understand if tracked separately)	
Other	
Sustainability	
Art	
PROJECT TOTAL	

Att 1 Ex E - DNRP-WTD Invoice Format V1

