
WTD Capital Project Prioritization Process

Metropolitan Water Pollution Abatement
Advisory Committee

E&P Subcommittee

July 16, 2008

Presentation Overview

- Purpose
- Prioritization Fundamentals
- Prioritization Process
- Review Examples

Purpose of WTD's Prioritization Process

- Provide an objective decision making process
- Allocate limited resources to the most needed projects
- Assign priorities based on organizational goals and objectives

Prioritization Fundamentals

- All active projects are prioritized every year until they reach the Implementation Phase, at which point they receive the maximum score
 - The Implementation Phase typically begins when a construction contract is signed
- Project cost has no bearing on how projects are ranked

Prioritization Fundamentals

- Capital projects are grouped into three categories so that only like projects compete against each other
 - Major Capital – projects that provide new or additional capacity
 - Asset Management – projects that rehabilitate or improve existing facilities or processes
 - Planning – projects involving plans, studies, and technology assessments

Prioritization Fundamentals:

Criteria Groupings by Project Type

Major Capital

- Regional Capacity Needs
- Public Health, Safety, and Property
- Regulatory or Contractual Requirements
- Natural Resource Protection
- Cost Savings

Asset Management

- Service Disruption and Impacts from Asset Failure
- Employee Safety
- Regulatory or Contractual Requirements
- Remaining Equipment Life/Asset Damage
- Cost Savings

Planning

- Regional Service Needs
- Public Health Protection
- Regulatory Compliance
- Contractual Requirements and Mandates
- Natural Resources Protection
- Cost Savings

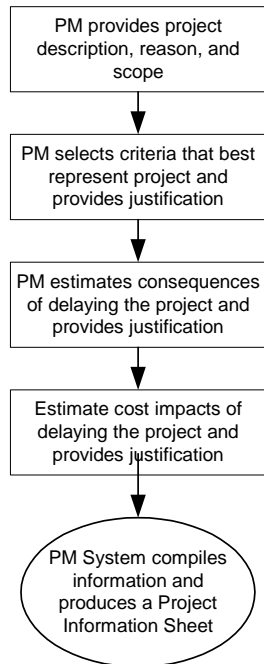
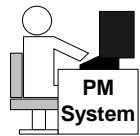
Prioritization Fundamentals:

Major Capital Criteria for “Regional Capacity Needs”

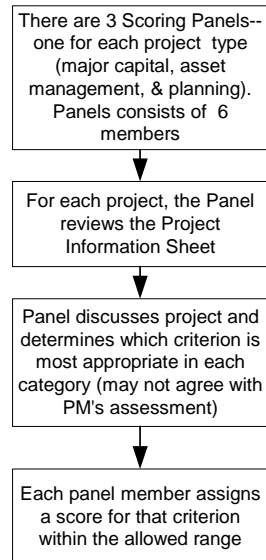
- ❑ 8–10 Provides capacity by constructing new or upgrading existing facilities . . . where failure to complete the project according to schedule will result in overflow conditions
- ❑ 4–7 Provides capacity by constructing new or upgrading existing facilities . . . where failure to complete the project according to schedule may result in overflow conditions . . .
- ❑ 0–3 Provides capacity by constructing new or upgrading existing facilities . . . where failure to complete the project according to schedule will not likely result in overflow conditions

Prioritization Process

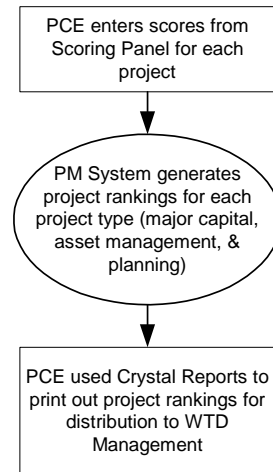
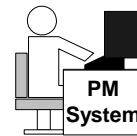
Step 1
Project Manager
Completes Project
Evaluation



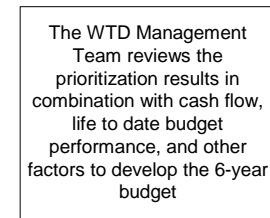
Step 2
Scoring Panel
Evaluates Projects



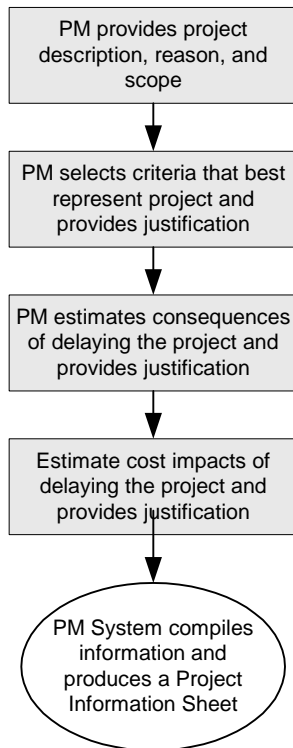
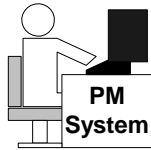
Step 3
Project Control
Engineer inputs scores
& compiles reports



Step 4
WTD Management
review results as part of
budget decision making



Step 1: PMs Complete Project Evaluation



- During the annual budget process, project managers log on to the King County Project Management System and complete a project evaluation
 - Enter general project information
 - Select which criteria they think apply and provide justifications
 - Estimate consequences of delay and provide justifications
 - Estimate cost impacts of delay and provide justifications

PMs provide general information about the project

King County Project & Contract Management System Print Stark, David

Reminders Projects System

Project Number & Name	Subproject Number & Name	Project Manager	Active
423135	Interbay Pump Station	Draper Sarah	

Info Scope Status Schedule Spending

Evaluation Forecast Subprojects Cost Report

Welcome General Criteria Consequences Cost Impact Choose Year 2006

Description: Interbay Pump Station Phase II Upgrade

Reason: One objective of this project is to increase the firm capacity of the Interbay Pump Station to 133 mgd. Conveying 133 mgd from the Interbay station to the West Point plant for secondary treatment is a requirement of the Secondary/CSO Program and necessary to meet our agreement with WDOE. Other objectives of the project include replacing obsolete mechanical and electrical equipment, replacing and upgrading HVAC systems, upgrading

Scope: The scope includes replacing aging mechanical and electrical equipment and building components, replacing obsolete raw sewage pumping equipment, increasing capacity to 133 mgd, upgrading emergency power generation capacity, addressing code issues, and providing odor control at the pump station and the force main discharge structure. This project reflects the second phase (Phase II) of a two-phase upgrade project that began in 1990.

Scope Change: An Asset Management Program condition assessment in 2004 indicated the project should not be delayed because many items of equipment require replacement in 5 years. The assessment also recommended replacing many items of aging equipment that were not included in the predesign scope. The current scope and budget combine the predesign scope approved in 2003 with the additional work identified in 2004.

Status: Amendment to add final design to consultant contract is in progress. Level II site assessments of soils are in progress.

Budget Phase: 3.1 consultant contract NTP (Project Phase During 1st Quarter 2007)

For Finance Use Only

Budget Share: Asset Mgt % New 9.0 % Existing 91.0

Draper, Sarah 02/03/2006

Approve

All Projects My Projects Selected Project Quickfind:

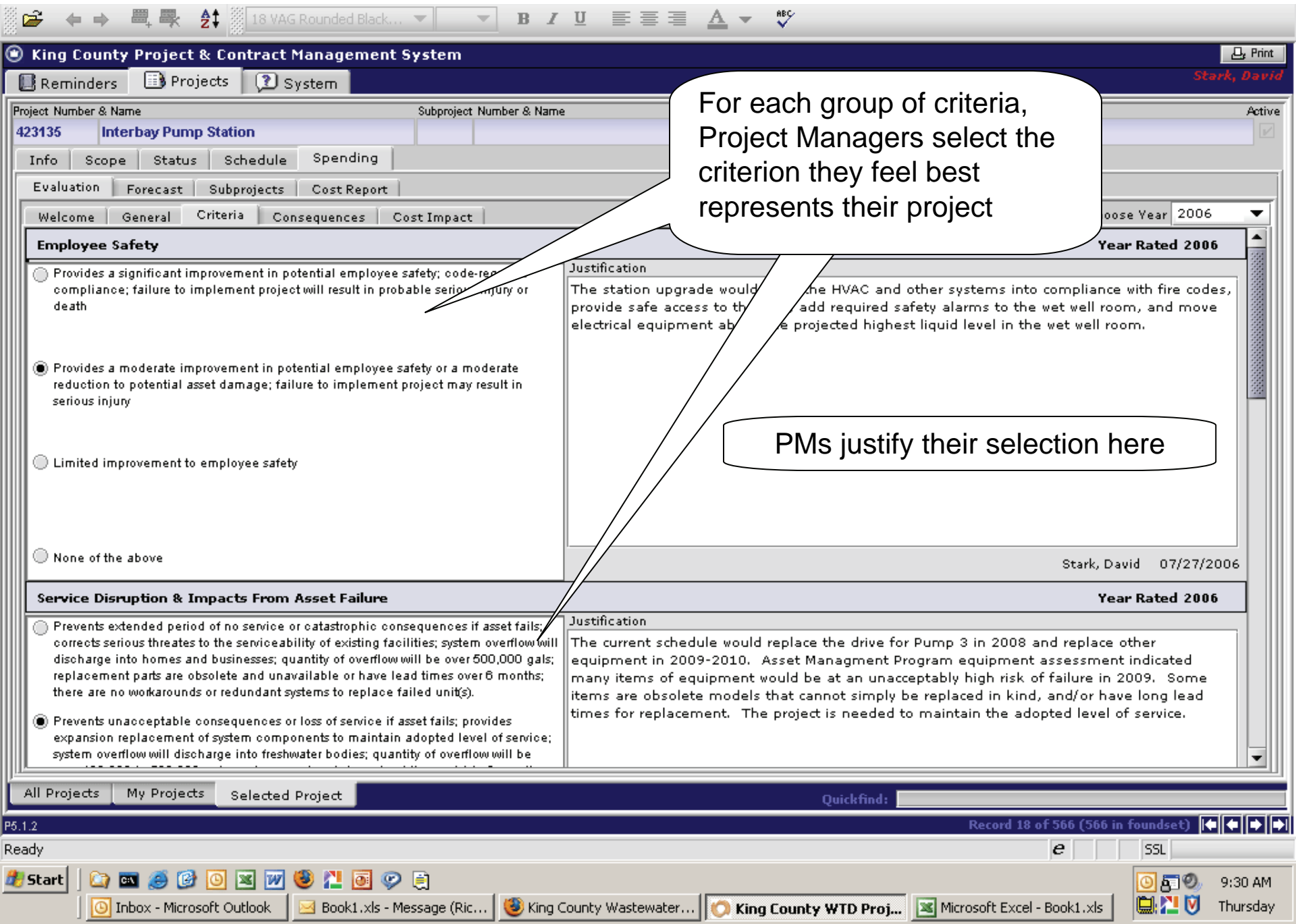
P5.1.1 Record 18 of 566 (566 in foundset)

Ready SSL

Start 10:47 AM Friday

Book1 (4)... Adobe Ph... Microsoft... Crystal R... 2 Adob... Microsoft... 3 Micro... 2 Micro... King Cou...

PMs select which criteria best apply and provide justifications



For each group of criteria, Project Managers select the criterion they feel best represents their project

PMs justify their selection here

Project Number & Name: 423135 Interbay Pump Station
Subproject Number & Name:

Info | Scope | Status | Schedule | Spending

Evaluation | Forecast | Subprojects | Cost Report

Welcome | General | Criteria | Consequences | Cost Impact

- ### Employee Safety
- Provides a significant improvement in potential employee safety; code-compliance; failure to implement project will result in probable serious injury or death
 - Provides a moderate improvement in potential employee safety or a moderate reduction to potential asset damage; failure to implement project may result in serious injury
 - Limited improvement to employee safety
 - None of the above

Justification

The station upgrade would bring the HVAC and other systems into compliance with fire codes, provide safe access to the wet well room, add required safety alarms to the wet well room, and move electrical equipment above the projected highest liquid level in the wet well room.

- ### Service Disruption & Impacts From Asset Failure
- Prevents extended period of no service or catastrophic consequences if asset fails; corrects serious threats to the serviceability of existing facilities; system overflow will discharge into homes and businesses; quantity of overflow will be over 500,000 gals; replacement parts are obsolete and unavailable or have lead times over 6 months; there are no workarounds or redundant systems to replace failed unit(s).
 - Prevents unacceptable consequences or loss of service if asset fails; provides expansion replacement of system components to maintain adopted level of service; system overflow will discharge into freshwater bodies; quantity of overflow will be

Justification

The current schedule would replace the drive for Pump 3 in 2008 and replace other equipment in 2009-2010. Asset Management Program equipment assessment indicated many items of equipment would be at an unacceptably high risk of failure in 2009. Some items are obsolete models that cannot simply be replaced in kind, and/or have long lead times for replacement. The project is needed to maintain the adopted level of service.

All Projects | My Projects | Selected Project

Quickfind: _____ Record 18 of 566 (566 in foundset)

PMs estimate the cost impacts of delaying their project and provide a justification

The screenshot displays the 'King County Project & Contract Management System' interface. The main window shows project details for '423135 Interbay Pump Station'. The 'Cost Impact' tab is active, showing three levels of cost impact estimates:

- Level 1: Increase up to 15% of the lifetime project costs** (Year: 2007)
- Level 2: Increase up to 30% of the lifetime project costs** (Year: 2010)
- Level 3: Increase up to 50% of the lifetime project costs** (Year: NA)

Each level includes a 'Justification' field. The first level's justification text is partially visible: 'Delays beyond the current schedule are expected to result in the need for interim short-term replacements that would increase the overall cost. Emergency interim replacement of some components (including some major pumping system components) would have greater relative cost due to the existing equipment being obsolete and the need for the permanent items to be of a different type or size, or in a different location, than the existing.' The second level's justification text is: 'It should be assumed that more substantial delays could result in emergency interim replacements with higher cost, followed by the ultimate upgrades at increased cost.' The third level's justification is 'Not applicable.'

At the bottom of the window, there are navigation tabs: 'All Projects', 'My Projects', and 'Selected Project'. A 'Quickfind:' search bar is also present.

Project Managers select the year (if any) in which they feel a cost impact will occur. There are five possible cost impacts: (1) NA, (2) up to 15% increase in lifetime project costs; (3) up to 30% increase, (4) up to 50% increase, and (5) over 50 percent increase. In this case, if the project is delayed until 2007, the lifetime project costs will increase by 15 percent.

PMs justify their selection here

PMs estimate the consequences of delaying their project and provide justification

To estimate the consequences of delaying a project, Project Managers select the year (if any) in which moderate consequences (as defined on the left of the screen) may occur. In this case, if the project is delayed until 2007, one or more of the consequences may occur. This is repeated for serious consequences below.

PMs justify their selection here

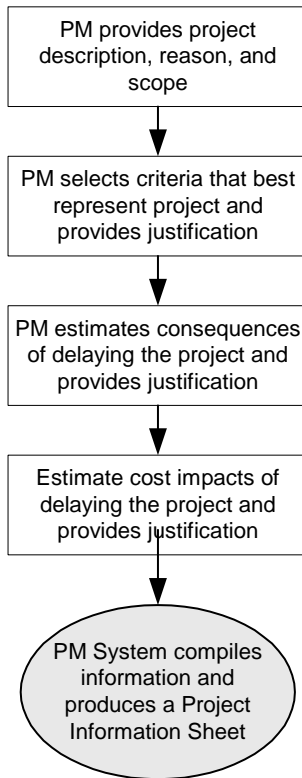
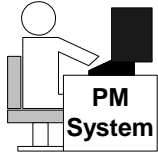
The screenshot displays the 'King County Project & Contract Management System' interface. The main window shows project details for 'Interbay Pump Station' (Project Number 423135). The 'Consequences' tab is active, showing a table with two rows for 'Year of Moderate Consequences' and 'Year of Serious Consequences', both set to 2007. The 'Justification' column contains text explaining the current schedule and the risks of delay. A callout box points to the '2007' selection in the 'Year of Moderate Consequences' row.

Year of Moderate Consequences	Justification
2007	The current schedule replaces the drive for Pump 3 in 2008 and completes all other upgrades in 2009-2010. Construction is estimated to require almost 3 years. The Asset Management Program equipment assessment indicated most equipment in the station would require replacement by 2009. CSO Program agreements were based on upgrading capacity by 2005. If the schedule is delayed, the risk of equipment failure will become excessive. If the project were delayed, several WDOE requirements and code requirements would remain unmet.
Year of Serious Consequences	Justification
2007	The current schedule replaces the drive for Pump 3 in 2008 and completes all other upgrades in 2009-2010. Construction is estimated to require almost 3 years. The Asset Management Program equipment assessment indicated most equipment in the station would require replacement by 2009. CSO Program agreements were based on upgrading capacity by 2005. If the schedule is delayed, the risk of equipment failure will become excessive. If the project were delayed, several WDOE requirements and code requirements would remain unmet.

Stark, David 07/27/2006

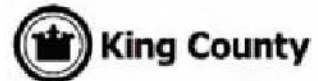
Year Rated 2006

Step 1: PMs Complete Project Evaluation



- The Project Management System then compiles this information into a Project Information Sheet
- One sheet is generated for each project

Project Information Sheet – Page 1



Asset Mgt - Project Information Sheet

Project/Sub Proj. No.	Project Mgr	Status/Phase	Facility
423135	Draper, Sarah	Final Design	Interbay PS

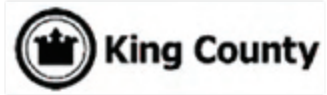
Project Name
Interbay Pump Station

Project Description
Interbay Pump Station Phase II Upgrade

Reason:
One objective of this project is to increase the firm capacity of the Interbay Pump Station to 133 mgd. Conveying 133 mgd from the Interbay station to the West Point plant for secondary treatment is a requirement of the Secondary/CSO Program and necessary to meet our agreement with WDOE. Other objectives of the project include replacing obsolete mechanical and electrical equipment, replacing and upgrading HVAC systems, upgrading emergency power generation capacity, updating controls, addressing wet well equipment issues, roof replacement and access, pavement and underground tank issues, providing odor and corrosion control at the force main discharge structure, and providing odor control at the pump station.

Scope:
The scope includes replacing aging mechanical and electrical equipment and building components, replacing obsolete raw sewage pumping equipment, increasing capacity to 133 mgd, upgrading emergency power generation capacity, addressing code issues, and providing odor control at the pump station and the force main discharge structure. This project reflects the second phase (Phase II) of a two-phase upgrade project that began in 1990. The Phase I Upgrade was completed in 1996. The lifetime actual costs for Project 423135 include past costs from the Phase I Upgrade. The schedule shown reflects only the Phase II Upgrade.

This section of the Information Sheet provides general information about the project, including the project manager, project name, number, phase, description, scope, and the reason for doing the project.



Asset Mgt - Project Information Sheet

Project Manager Self Evaluations

Employee Safety

2 PM Justification: The station upgrade would bring the HVAC and other systems into compliance with fire codes, provide safe access to the roof, add required safety alarms to the wet well room, and move electrical equipment above the projected highest liquid level in the wet well room.

Service Disruption & Impacts From Asset Failure

2 PM Justification: The current schedule would replace the drive for Pump 3 in 2008 and replace other equipment in 2009-2010. Asset Management Program equipment assessment indicated many items of equipment would be at an unacceptably high risk of failure in 2009. Some items are obsolete models that cannot simply be replaced in kind, and/or have long lead times for replacement. The project is needed to maintain the adopted level of service.

Regulatory or Contractual Requirements

2 PM Justification: Existing CSO program agreements were based on upgrading capacity by 2005. Existing secondary program requirements (which have not been renegotiated) were based on upgrading capacity by 2000. Three fully functional pumping systems are required to meet WDOE standards for standby pumping equipment. A larger emergency generator is required to meet WDOE standards for Class 1 Reliability. The altered wet well ventilation may no longer comply with the Phase I Fire Marshall agreement.

Remaining Equipment Life & Asset Damage

3 PM Justification: A condition assessment conducted by the Asset Management Program in 2004 concluded that most equipment in the station will be operating at an unacceptably high risk of failure by 2009. That falls within the current lead time to finish the project, because construction is expected to take almost 3 years, and the current schedule would complete the upgrades in 2009-2010.

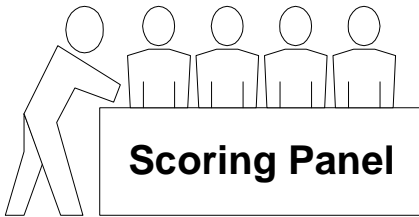
Cost Savings

2 PM Justification: The project provides an efficient opportunity to combine required components (increased pumping capacity, replacement of aging and obsolete equipment, increased emergency power generation capacity) and other goals in one coordinated design and a two-part installation. Tight site with underground tankage limits the options for phasing these installations. Interim or emergency replacement of some items would be significantly more expensive. The project provides a significant improvement in the level of service.

This section of the Information Sheet shows which criteria the PM selected. The numbers correspond to the hierarchy of the criteria; for example, 3 corresponds to the highest ranking criterion, 2 to the middle, and 1 to the lowest. A "0" will appear if the PM felt that none of the criteria applied

The PM justifications are provided here

Step 2: Scoring Panels Evaluate Projects



There are 3 Scoring Panels--one for each project type (major capital, asset management, & planning). Panels consists of 6 members

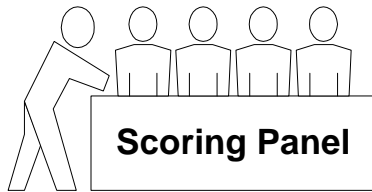
For each project, the Panel reviews the Project Information Sheet

Panel discusses project and determines which criterion is most appropriate in each category (may not agree with PM's assessment)

Each panel member assigns a score for that criterion within the allowed range

- There are three 6-person scoring panels
- One team for each project category
 - Major CIP
 - Asset Management
 - Planning
- Managers of these sections nominate 6 people from across WTD to score their projects

Panel Members Must Agree Which Criterion Best Represents the Project



There are 3 Scoring Panels-- one for each project type (major capital, asset management, & planning). Panels consists of 6 members

For each project, the Panel reviews the Project Information Sheet

Panel discusses project and determines which criterion is most appropriate in each category (may not agree with PM's assessment)

Each panel member assigns a score for that criterion within the allowed range

- For example, after reviewing the Information Sheet for the Interbay Pump Station, the panel members agreed that the last criterion in Employee Safety was most appropriate*

Employee Safety Criteria

- **8-10:** Provides a significant improvement in potential employee safety; code-required compliance; failure to implement project will result in probably serious injury or death
- **4-7:** Provides a moderate improvement in potential employee safety or a moderate reduction to potential asset damage; failure to implement project may result in serious injury
- **0-3:** Limited improvement to employee safety

- Panel members then individually score the project in the allowed range of 0–3 on the scoring sheet

* The Panel's selection may or may not agree with project manager's selection

Example: Panel Members Score Within the Allowed Range



2005 CIP Budget - Asset Management Scoring Sheet

Rater: Karl Zimmer

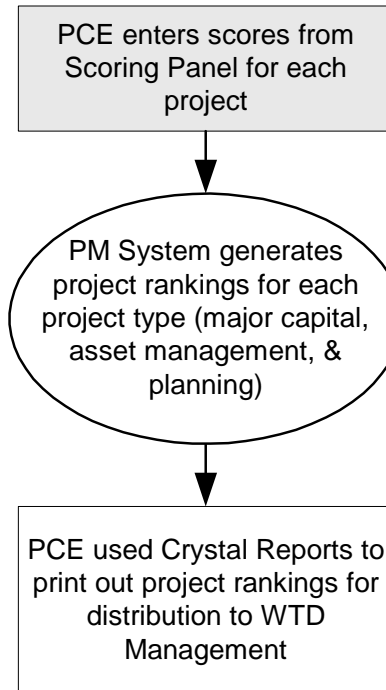
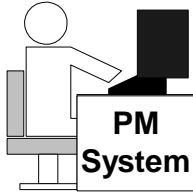
Here is a scan of an Asset Management Scoring Sheet. In this example, the panel agreed that the appropriate criterion for Employee Safety for the Interbay Pump Station was in the 0-3 range, so this panel member scored the project a "3"

Project/Sub Project Number	Project Description	Scoring Criteria				
		Employee Safety	Service Disruption & Impacts From Asset Failure	Regulatory or Contractual Requirements	Remaining Equipment Life & Asset Damage	Cost Savings
2004-35	South Plant Daft Tank Restoration	0	5	1	8	4
2005-006	WPTP Fugitive Odors and H2S Corrosion Improvement Project					
2005-010	Future AM Master Plan Projects	0	4	1	6	4
2006-017	WPTP Gas Piping Replacement	4	5	2	8	1
2006-027	Replace STP Gas Scrubbing Towers	4	5	4	3	4
2006-028	STP - Add Fourth Centrifuge to Dewatering	0	1	1	1	0
2007-004	Barton Force Main Repair					
2007-005	Phoenix Odor Control System Replacements for Lake City Regulator & York Force Main Discharge	7	2	3	8	7
2007-006	Evaluation of South Plant & West Point Odor Improvements	0	1	5	0	0
2007-008	Future Asset Management Capital					
2007-009	Ballard Siphon Evaluation	0	10	8	9	0
423135	Interbay Pump Station	3	7	7	8	7
423407	Kirkland PS - Modifications	3	7	7	8	7
423417	Grit System Improvements	1	2	3	3	2
423439	Fremont Siphon Odor Control	2	7	6	3	2

Here are the scores from the other panel members for the Interbay Pump Station. Notice their scores vary but are all in the 0-3 range

Project/Sub Project Number	Project Description	Scoring Criteria				
		Employee Safety	Service Disruption & Impacts From Asset Failure	Regulatory or Contractual Requirements	Remaining Equipment Life & Asset Damage	Cost Savings
423135	Interbay Pump Station	1	4	4	8	4
423135	Interbay Pump Station	3	7	7	8	6
423135	Interbay Pump Station	3	6	5	8	6
423135	Interbay Pump Station	1	5	4	8	4
423135	Interbay Pump Station	3	7	7	9	7

Step 3: Generate Project Rankings



- After each scoring session is held, a project control engineer enters the scores into the Project Management System
- The System calculates a score for each project (next slide)

Example: How Project Scores are Calculated

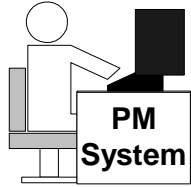
Scores for Interbay Pump Station (Asset Management Project)

Project/Sub Project Number		Scoring Criteria					
		Employee Safety	Service Disruption & Impacts From Asset Failure	Regulatory or Contractual Requirements	Remaining Equipment Life & Asset Damage	Cost Savings	
423135	Interbay Pump Station	3	7	7	8	7	
423135	Interbay Pump Station	1	4	4	8	4	
423135	Interbay Pump Station	3	7	7	8	6	
423135	Interbay Pump Station	3	6	5	8	6	
423135	Interbay Pump Station	1	5	4	8	4	
423135	Interbay Pump Station	3	7	7	9	7	
Total		14	36	34	49	34	167

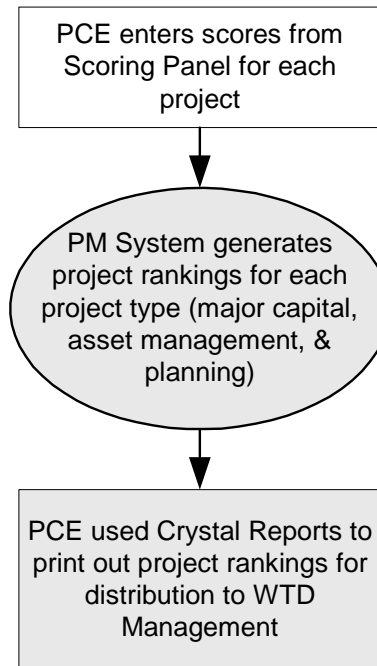
Project Score = 167 / 6 scorers = 27.8

- Each criterion is worth 10 points maximum
 - Asset Management and Major Capital projects have 5 sets of criteria, so the maximum score = 50
 - Planning projects have 6 sets of criteria, so the maximum score = 60

Reports are Developed for Management Team



- One report is developed for each project category
 - Major CIP
 - Asset Management
 - Planning



Scoring Results Excerpt

Project	Sub	PM	Section	Project Name	Actuals	Running Total	2008	Totals	Score
				Budget Share			\$70,200,000		
423603		Slatten, Bryon	Asset Mgmt	South Plant Daft Tank Restoration	57,401	23,831,746	422,058	919,928	50.0
423613		Hildreth, Sue	Asset Mgmt	WPTP Heating and Cooling Loop Improvements	0	25,880,719	2,048,973	2,863,396	50.0
423135		Draper, Sarah	Asset Mgmt	Interbay Pump Station	6,614,842	28,016,153	2,135,434	32,799,050	33.3
423617		Apgar, Dirk	Asset Mgmt	Sweyolocken Phoenix Odor Scrubber Replacement	170	28,773,938	757,785	1,076,191	29.3
423605		Apgar, Dirk	Asset Mgmt	Phoenix Odor Control System Replacements for Lake City	99,785	29,396,848	622,910	878,247	28.7
423506	305	Alver, Ken	Asset Mgmt	Barton Pump Station Upgrade	410,585	29,806,848	410,000	14,479,044	28.5
423407		Kessler, Bruce	Asset Mgmt	Kirkland PS - Modifications	2,258,670	30,712,601	905,753	15,916,644	27.5
423602		Franklin, Ade	Asset Mgmt	Ballard Siphon Repair	4,003,079	34,507,601	3,795,000	35,726,519	25.8
2007-011		Worrell, Julian	Asset Mgmt	SP Assess & Replace Raw Sewage Pumps, Motors and Drives	0	34,507,601	0	29,157,750	25.7
423573		Goon, Tim	Asset Mgmt	SP STP Convert Disinfection From Chlorine To Sodium	1,591,455	35,058,993	551,392	5,836,317	25.2
2009-005		Alver, Ken	Asset Mgmt	North Mercer Island PS Generator Replacement	0	35,058,993	0	1,061,209	24.2
423597	100	Fleet, Crystal	Asset Mgmt	Kenmore Interceptor; Lake Hills Interceptor and EBI 2	192,968	37,973,492	2,914,500	4,749,126	23.3
2009-006		Truman, Dave	Asset Mgmt	Centrifuge Replacement at WPTP	0	37,973,492	0	540,377	21.3
423506	310	Alver, Ken	Asset Mgmt	Murray Generator and Odor Control Project	29,784	39,140,159	1,166,667	3,033,284	20.8
423579		Roswell,	Asset Mgmt	Remodeled Buildings at WPTP	265,309	39,206,799	66,639	406,854	20.5
423592		Worrell, Julian	Asset Mgmt	West Division Regulator Stations and Four Pump Stations	2,724,938	40,580,027	1,373,228	21,171,816	20.5
423493	911	Mattern, Rob	Asset Mgmt	Process Network Security	234,222	41,036,027	456,000	960,082	19.7
423561		Fleet, Crystal	Asset Mgmt	WPTP Digester Compressor System Modification	481,593	41,196,555	160,528	1,080,559	19.0
423506	315	Alver, Ken	Asset Mgmt	Small Generators West Regulator Stations	9,017	41,676,555	480,000	3,375,327	18.3
2009-001		Stark, David	Asset Mgmt	Influent Screening Improvements at the WPTP	0	41,676,555	0	3,434,835	18.2
2009-008		Adeyemi, Larry	Asset Mgmt	Forcemain and Siphon Inspection Access Improvements	0	41,676,555	0	2,735,956	18.0
423597		Fleet, Crystal	Asset Mgmt	Pipeline Rehabilitation Lining for H2S Corrosion Control	354,384	41,818,044	141,489	28,703,682	17.7
423493	110	Mattern, Rob	Asset Mgmt	West Section Controls System Replacement; Standards	141	41,818,044	0	9,873,675	17.2
423590		Alver, Ken	Asset Mgmt	Murray Avenue Pump Station Odor Control System Upgrade	94,873	41,845,844	27,800	672,281	16.8
423599		Goon, Tim	Asset Mgmt	Medina - Wilburton Permanant Odor Control System	257,778	42,509,665	663,821	3,175,104	15.5
423455		Apgar, Dirk	Asset Mgmt	University Regulator Station Odor Control	714,658	42,759,665	250,000	964,658	10.8
423468		Fleet, Crystal	Asset Mgmt	ESI Chemical Injection	226,690	42,926,685	167,020	837,644	10.0
423487		White, Sarah	Asset Mgmt	SP Sed Tank Corrosion Prevention	1,420,823	43,287,410	360,725	3,888,740	8.7
423493	303	Mattern, Rob	Asset Mgmt	Water Quality Data Store	264,994	43,507,410	220,000	670,394	8.2
423493	102	Mattern, Rob	Asset Mgmt	CSO Predictive Model	19,259	43,633,410	126,000	1,745,500	5.5
2009-004		Hildreth, Sue	Asset Mgmt	WTD Electronic Project Document Management	0	43,633,410	0	681,064	3.7

Cost Impacts of Delay

Consequences of Delay

1	mild consequence
2	moderate consequence
3	serious consequence

Project #	Sub #	Project Manager	Project	Section Name	score	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
423515	005	Huber, Karen	CSO Control & Improvements - Barton	Major CIP	37.00	1	1	1	1	1	1	1	1	1	1
423365		Dittmar, David	Hidden Lake PS/Boeing Creek Trunk	Major CIP	35.67	1	1	1	1	1	1	1	1	1	1
2006-005		Fernandes, Joe	North Creek Pipeline	Major CIP	33.67	1	1	3	3	3	3	3	3	3	3
423515	003	Huber, Karen	CSO Control & Improvements - Murray	Major CIP	33.50	1	1	1	1	1	1	1	1	1	1
423406		Okuda, Chris	Juanita Bay PS - Modifications	Major CIP	32.33	3	3	3	3	3	3	3	3	3	3
423363		Okuda, Chris	Auburn Facilities Assessment	Major CIP	32.00	3	3	3	3	3	3	3	3	3	3
423121		Thrasher, Kerry	Madsen Creek Erosion & Sewer Stabilization	Major CIP	31.50	3	3	3	3	3	3	3	3	3	3
423515	004	Huber, Karen	CSO Control & Improvements - North Beach	Major CIP	31.33	1	1	1	1	1	1	1	1	1	1
2006-003		Dittmar, David	Soos Creek H	Major CIP	29.67	2	3	3	3	3	3	3	3	3	3
423557		Osterhaug, Brenda	Camation Treatment Plant	Major CIP	29.17	1	1	1	1	1	1	1	1	1	1
423515	007	Huber, Karen	CSO Control & Improvement - University	Major CIP	28.33	1	1	1	2	2	2	2	2	2	2
423515	002	Huber, Karen	CSO Control & Improvements - Magnolia	Major CIP	28.00	1	1	1	1	1	1	1	1	1	1
423583		Dittmar, David	Soos Creek Pump Station D And Pipeline D (2004-02)	Major CIP	27.67	2	3	3	3	3	3	3	3	3	3
423582		Strehler, Andy	SW Interceptor (2004-03)	Major CIP	27.17	1	1	3	3	3	3	3	3	3	3
423521		Namini, Shahrzad	Bellevue Pump Station	Major CIP	26.50	3	3	3	3	3	3	3	3	3	3
2006-004		Peterson, Bob	Bob Peterson's Reuse Project	Major CIP	18.00	1	1	1	1	2	2	3	3	3	3

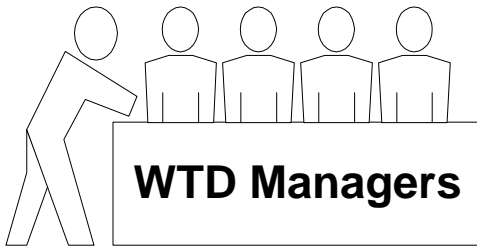
Consequences of Delay

Cost Impacts of Delay

0	inflation only
1	up to 15% increase
2	up to 30% increase
3	up to 50% increase
4	>50% increase

Project #	Sub #	Project Manager	Project	Section Name	Score	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Asset Management															
423551		Suko, Greg	Electrical / I&C	Asset Management	50.00	0	0	0	0	0	0	0	0	0	0
423552		Borchers, Pat	Mechanical Upgrade & Replacement	Asset Management	50.00	3	3	3	3	3	3	3	3	3	3
423553		Fleet, Crystal	Odor / Corrosion Control	Asset Management	50.00	0	0	0	0	0	0	0	0	0	0
423554		Truman, Dave	Process Replacement / Improvement	Asset Management	50.00	0	0	0	0	0	0	0	0	0	0
423555		Borchers, Pat	Pipeline Replacement	Asset Management	50.00	0	0	0	0	0	0	0	0	0	0
423556		Fleet, Crystal	Structures / Site Improvement	Asset Management	50.00	0	0	0	0	0	0	0	0	0	0
423135		Draper, Sarah	Interbay Pump Station	Asset Management	41.83	1	1	1	1	2	2	2	2	2	2
423563		Worrell, Julian	East Offsite Control Systems & West Offsite Facilities Electrica	Asset Management	38.17	1	2	2	2	2	2	2	2	2	2
423592		Worrell, Julian	West Division Regulator Stations and Four Pump Stations Upgr	Asset Management	38.00	0	0	0	0	0	0	0	0	0	0
423578		Draper, Sarah	Bellevue Interceptor Pipe Replacement	Asset Management	34.00	3	3	3	3	3	3	3	3	3	3
423574		Roswell, Jacquelynn	STP Fire Alarm System Upgrade	Asset Management	32.00	0	1	1	2	2	2	2	3	3	3
423573		Suko, Greg	SP STP Convert Disinfection From Chlorine To Sodium	Asset Management	29.67	0	0	0	0	0	0	0	0	0	0
423474		Hildreth, Sue	WTP West Point Cogen Upgrade	Asset Management	29.00	1	2	4	4	4	4	4	4	4	4
2005-010		Barnett, Joe	Future AM Master Plan Projects	Asset Management	28.33	0	0	1	1	2	2	3	3	4	4
423493	911	Mattem, Rob	Process Network Security	Asset Management	27.67	4	4	4	4	4	4	4	4	4	4
423514		White, Sarah	WTD Corrosion Prevention	Asset Management	26.67	0	0	0	0	0	0	0	0	0	0
423493	303	Mattem, Rob	Water Quality Data Store	Asset Management	26.33	1	2	3	3	4	4	4	4	4	4
423493	104	Mattem, Rob	East Section Plant & SCADA Control System Upgrade	Asset Management	26.00	4	4	4	4	4	4	4	4	4	4
423493	110	Mattem, Rob	West Section Controls System Replacement; Standards Implen	Asset Management	26.00	0	0	1	2	3	4	4	4	4	4
2006-017		Truman, Dave	WFTP Gas Piping Replacement	Asset Management	25.00	0	0	0	0	0	0	0	0	0	0
423493	401	Franklin, Ade	Asset Management System	Asset Management	22.00	0	1	1	3	3	3	3	3	3	3
423439		Goon, Tim	Fremont Siphon Odor Control	Asset Management	22.00	0	1	1	1	2	2	2	2	2	3
423593		Smyth, John	WP Digestion Improvements	Asset Management	21.67	0	0	0	0	0	0	0	0	0	0
423591		Roswell, Jacquelynn	New and Remodeled Buildings at STP	Asset Management	21.50	0	0	0	0	1	1	1	1	1	2
423566		Strehler, Andy	West Point OGADS VSA-2 Media & Retention-Screen Replacer	Asset Management	20.83	0	0	1	2	2	3	4	4	4	4
2006-011		Fleet, Crystal	Pipeline Rehabilitation Lining for H2S Corrosion Control	Asset Management	20.00	0	2	3	3	4	4	4	4	4	4
423561		Fleet, Crystal	WFTP Digester Compressor System Modification	Asset Management	18.67	0	0	0	0	0	0	0	0	0	0
2005-006		Adeyemi, Larry	WFTP Fugitive Odors and H2S Corrosion Improvement Project	Asset Management	18.50	0	1	1	1	1	1	1	1	1	1
423407		Draper, Sarah	Kirkland PS - Modifications	Asset Management	18.33	1	1	1	1	2	2	2	2	2	2
423549		Gaskill, Liz	53rd Street Pump Station Upgrade	Asset Management	18.33	1	2	3	4	4	4	4	4	4	4
423417		Andrews, Jules	Grit System Improvements	Asset Management	16.33	0	0	0	0	0	0	0	0	0	0
2006-027		Suko, Greg	Replace STP Gas Scrubbing Towers	Asset Management	15.67	0	0	0	0	0	0	0	0	0	0
423588		Adeyemi, Larry	Densmore Stormwater System Improvement Project	Asset Management	15.17	1	1	1	1	1	1	1	1	1	1
423590		Kaminsky, Mark	Murray Avenue Pump Station Odor Control System Upgrade	Asset Management	13.00	1	4	4	4	4	4	4	4	4	4
423455		Apgar, Dirk	University Regulator Station Odor Control	Asset Management	11.33	1	1	2	2	3	3	3	3	3	3
423587		Andrews, Jules	Dechlorination Systems at CSO Facilities (Alki and Carkeek)	Asset Management	9.83	0	0	1	1	2	2	3	3	4	4
423493	901	Mattem, Rob	Network Enhancements and Information Portal, Part I	Asset Management	9.33	1	2	3	4	4	4	4	4	4	4

Step 4: WTD Management Team Review Prioritization Results



- Management Team uses the project rankings as one tool in developing the 6-year capital budget

The WTD Management Team reviews the prioritization results in combination with cash flow, life to date budget performance, and other factors to develop the 6-year budget