



Asset Management Division

Greg Chol, Manager

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Where Documented or Studied	Data Systems Utilized	Level of Service (it was determined during Phase 2 that Level of Service determination will be developed in the future and only on an as needed basis)		Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
					Existing	Target							
Implement Asset Replacement / Devaluation Program	Develop Replacement Cost Valuation Methodology	S. Young			TBD	TBD	AW	PW			<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Not Currently Provided	Denver Stormwater Master Plan Provides Example
	Develop Replacement / Rehabilitation Costs	S. Young			TBD	TBD	AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Not Currently Provided	Potentially Could Average with Annual Bid Tab Averages
	Maintain Current Replacement / Rehabilitation Costs	S. Young			TBD	TBD	AW	PW			<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
											<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		

# CAPITAL IMPROVEMENT PROJECTS

Steve Fiori, Project Delivery Services Manager

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Data Systems Utilized	Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
Leverage UDFCD Funding	Identify Projects for Potential UDFCD Funding or Partial	" "	N/A	AW	PW, AP	O&M	Steve Fiori, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	A quantitative process should be established for determining the funding source shares on capital projects	
	With UDFCD Initiate Projects and Participate as Needed	" "	N/A	AW	N/A	O&M	Steve Fiori, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Process Needs to be Developed	
	Coordinate with UDFCD 5-year Plan and Longer Terms Plans	Projects Delivery Services Manager	UDFCD Project Spreadsheet	AW	PW, AP	O&M	Steve Fiori, Sarah Young, Joe McCleary, Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Process Needs to be Developed	
								<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
								<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
								<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
								<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
Prioritize Capital Projects List	Develop Project List from Master Plans	Planning Services Manager	N/A	AW	N/A	O&M	Sarah Young, Bill McCormick, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	List Needs to be Developed	
	Develop Project List from EDC/Development Projects	" "	N/A	AW	PW, EDC	O&M	Sarah Young, Cliff Stephens, Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	List Needs to be Developed	
	Develop Project List from IGAs and Other Sources	" "	IGA Spreadsheet	AW	PW	O&M	Sarah Young, Cliff Stephens, Bill McCormick, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	List Needs to be Developed, IGA Spreadsheet may or may not actually exist?	
	Create Project Initiation Forms for New Projects	" "	N/A	AW	PW, EDC	O&M	Sarah Young, Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Enter New Projects Into Expert Choice and DSMP	" "	DSMP	AW	PW	O&M	Sarah Young, Jon Villines, Bill McCormick, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Prioritize Capital Improvement Plan Annually Using Expert Choice and DSMP	" "	Expert Choice	AW	PW	O&M	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Using DSMP or Expert Choice Prioritization as a Starting Point, Develop Short and Long Term CIP Plans	" "	Expert Choice	AW	N/A	O&M	Sarah Young, Steve Fiori	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		" "
	Coordinate CIP Needs w/Staff Resources	Project Delivery Services Manager		AW	N/A	N/A	Steve Fiori	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
							<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
Manage Stormwater Design & Construction Projects	Prepares Scope, Assign PM	Project Delivery Services Manager	EADocs	AW CPD	N/A	N/A	Steve Fiori, Project Manager As-Assigned	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	For In-house Design Prepare IDA, Assign Engineer	" "	" "	AW CPD	PW	N/A	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	For MESA Projects Assign PM, Prepare Scope, and Evaluate Selection	" "	" "	AW CPD	N/A	N/A	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	For RFP Projects Assign PM, Prepare Scope, Interview, Evaluate Selection	" "	" "	AW CPD	PW, AP	N/A	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinate with CDOT, RTD, etc. as needed.	" "	" "	AW CPD	N/A	N/A	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinate with O & M for maintenance needs in plans.	" "	" "	AW CPD	N/A	O&M	Steve Fiori, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinate with Parks and Open Space if needed.	" "	" "	AW CPD	PROS	N/A	Steve Fiori, Curtis Bish	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Provide public involvement and education	Public Relations Manager	" "	AW PR	COA PR	N/A	Greg Baker	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Complete Design Work	Project Delivery Services Manager	" "	AW CPD	PW	N/A	Steve Fiori, Project Manager As-Assigned	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Provide Design Review, revisions and approval	Engineering Services Manager	AMANDA	AW Eng	PW, AP	N/A	Vacant	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Secure Permits	Water Permit Coordinator	N/A	AW CPD	PW	O&M	Asif Samuel	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Prepare interdepartmental agreements with other departments as needed.	Project Delivery Services Manager	N/A	AW CPD	PW, AP	N/A	Steve Fiori, Project Manager As-Assigned	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Prepare maintenance plan with maintenance department	" "	N/A	AW CPD	N/A	O&M	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Obtain land rights, and maintenance easements as necessary.	" "	N/A	AW CPD	PW, ARP	O&M	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Bid Work, Supervise Construction incl Surveying, Inspection & CA.	" "	EADocs (?)	AW CPD	PW	N/A	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
Complete As-built Process	" "	N/A	AW CPD	N/A	AW Engineering	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Surveyed as-builts are not provided for CPD projects (same as for private developments). [Confirm]		

# CAPITAL IMPROVEMENT PROJECTS

Steve Fiori, Project Delivery Services Manager

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Data Systems Utilized	Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
	Provide As-Built Information to GIS for Transfer to Asset Management	" "	GIS, Infor	AW CPD	IT, AM	AW Planning	" "	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		After the Extension Agreement permits are issued, this is not really a CPD task.

**STORMWATER DATA SYSTEM FUNCTION MATRIX**

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Source, Where Documented or Studied	Data Systems Utilized	Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Level of Service (Level of Service shall be added as needed over time. Currently LOS has not been established for all functions)		Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
								Existing	Target				
Track Stormwater Assets in GIS System	Establish procedures to enter data as projects are completed	Craig Ellis		GIS		GIS, PW, AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Basin connectivity has not been included, Possibly create more automated procedures with GIS. S.O.P.s for entering data should be	
	Provide data from previously as-built drawings to GIS for entry			GIS		GIS, PW, AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Unknown what the status of getting all previous project information into GIS. Desire has been expressed to add design storm frequency to GIS, possibly other hydraulic parameters.	Primary Additions are Ownership and As built Data
	Respond to requests for GIS data entry or query			GIS		GIS, PW, AW, other		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	GIS, Oracle, and Infor are not currently integrated to leverage all stormwater data	
	Complete the asset database for all asset types such as drop structures, energy dissipaters, etc.			GIS		GIS, PW, AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	The asset database currently does not include all storm drainage related infrastructure. An example is drop structures.	
	Survey and enter elevations for existing stormwater assets			GIS, other?		GIS, PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Currently the GIS system does not have elevations for many asset types	Verify and record existing pipe, inlet, manhole, etc. sizes and materials during survey
	Establish minimum data quality req, and QC GIS stormwater data			GIS		GIS, PW, AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Concern has been expressed regarding the reliability of data in the GIS system	
	Leverage UDFCD Data to reduce need for duplication							TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Establish naming conventions for all assets, channel reaches, etc.							TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	This may have been done already?, Establish criteria for naming structure or pipe	Example of naming criteria: What structure would qualify as Flared End Section (FES) or Headwall (HW)?
Track Stormwater Assets Conditions, Photos, Videos, etc.	Provide condition assessments & asset management plans			INFOR, GIS?		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	A number of gaps may exist in the Infor system, including full GIS and Oracle integration, usage of existing data, gaps in data, use of cost information, historic information, asset information, etc. Phase 1 of the AISWMP indicated that "building the asset database" was a primary gap in the program	Ensure all infrastructure is rated on same rating system in order to relate all areas
	Establish procedures, enter conditions assessment data into INFOR			INFOR, GIS?		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input checked="" type="checkbox"/> Needs Further Study		Linking all systems and programs to share data could provide necessary process accuracy and streamlining
	Establish procedures, enter condition assessment data into GIS, if needed			INFOR, GIS?		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Provide and upload photos and videos			ORACLE, INFOR?		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		Can provide database link in GIS for photos and videos
	Track Life Cycle Costs			INFOR, EXPERT CHOICE, GIS		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	QC asset management and condition assessment data			INFOR		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Track projects from conditions assessments or replacement programs			INFOR		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Many other uses are possible using Infor, and a gap exists in that there needs to be work to identify whether these uses would be advantageous, save cost, eliminate repetition, etc.	Asset failure mode needs to be established per each asset type and applied on universal scale
	Determine asset failure mode to assist in prioritizing CIP or maintenance projects			INFOR		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
Respond to requests for condition data			INFOR, GIS, ORACLE?		AW, PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
Track Stormwater Hydrology, Hydraulic, and Conveyance Data	Enter H&H data from master plans or development projects			GIS		AW, PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	H & H data does not currently exist in GIS, Which H&H Data is Necessary?	
	Enter Conveyance data to GIS or other appropriate software			GIS		AW, PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Data gaps exist, for example there has been desire expressed for design storm frequency and design flows.	
	QC data			GIS		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	NEED to track sediment accumulation and erosion at conveyance systems	
	Respond to requests for conveyance data			GIS		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Efficiencies needed in data access to take advantage of existing systems	
	Coordinate data needs with UDFCD							TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	There is currently no coordination taking place between the data that UDFCD is tracking in GIS and what the City is tracking. The desire was expressed to minimize duplication in the databases.	
Track Stormwater Documents	Enter stormwater as-built drawings into database for new projects			ORACLE, GIS?		AW, PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
	Enter old stormwater as-builts to complete data set			ORACLE, GIS?				TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
	Enter and monitor development agreement terms and requirements			ORACLE, GIS?				TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
	Enter/track developer and outside agency maint. Agreements			ORACLE, GIS?		AW, PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
	Enter drainage easements and terms			ORACLE, GIS?		PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
	Track annexation agreement terms			ORACLE, GIS?		PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
	Track development drainage reports			ORACLE, GIS?		PW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Gaps exist in data set	
											<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
Track Stormwater CIP Prioritization Data, Cost, Priority Parameters	Enter stormwater project parameters into Expert Choice			EXPERT CHOICE		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Phase 2 will initially address	Establish CIP priorities with all parties to ensure all needs are being met
	Enter projects into EC as master plans are completed			EXPERT CHOICE		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Phase 2 will initially address	Establish expert choice process and training for performing analysis and calibration on system when necessary
	Update EC Parameters for CIP projects annually			EXPERT CHOICE		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Phase 2 will initially address	Once again, ensure ranking system in universally used to ensure all assets are given adequate importance
	Perform EC Analysis			EXPERT CHOICE		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Phase 2 will initially address	
	QC EC results			EXPERT CHOICE		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Phase 2 will initially address	
											<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
Track Work orders and Inspection Reports	Enter inspections reports into database			INFOR		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Establish field computerized form and upload process for completing forms, establish training	
	Enter work orders into database			INFOR		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Possibly automate upload / entry process to prevent errors / inaccuracy occurring. Tablet based input of work done in field, inspections, etc. is desired.	
	Enter completed work orders and documentation of work completed			INFOR		AW		TBD	TBD		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Possibly perform condition inspections during work orders, establish criteria / training per asset	

# STORMWATER DATA SYSTEM FUNCTION MATRIX

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Source, Where Documented or Studied	Data Systems Utilized	Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Level of Service <small>(Level of Service shall be added as needed over time. Currently LOS has not been established for all functions)</small>		Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
								Existing	Target				
											<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Training for the "map drawer" functionality of INFOR was noted as a need.	
											<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		

**Financial Management  
Division**  
Joe Ann Giddings, Manager

Function	Sub Function	Individuals with Notable Responsibility	Sub function Status	Known Gaps and Notes
<b>EXPENDITURES</b>				
Evaluate, Plan and Budget All Program Elements	Annually Evaluate & Plan Budgets for Program Elements for 1 Year, 5 Year and 20 Year Periods	Dan Mikesell	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	<p>A gap is the lack of budgeting and tracking for all program elements. If budgeting and tracking was done by program element, expenditures for the program elements could be budgeted and prioritized based on the overarching goals and objectives. However, this would involve more accounting time and may involve staff tracking their time. The accounting categories currently track maintenance and capital costs out of the 8 program elements. Two types of capital accounts are included in capital; capital projects and capital expenditures for such things as equipment. Accounting for capital projects is by each individual project account. Accounting for maintenance is shown as one line item on the accounting reports. Staff costs make up a large percentage of costs for programs elements other than capital. Staff costs are currently projected by payroll. Each staff person's costs are projected by percentages for stormwater, water, and wastewater. This projection is done by managers at the beginning of the year or multiple years. Managers have 15% of their time allocated to stormwater. Most other staff working on stormwater are allocated 100% to stormwater, but time is not allocated to program elements.</p>
	Planning	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Floodplain Administration	Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Capital Improvement	Steve Fiori	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	O&M	Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Asset Management	Greg Chol	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Regulatory	Sean Lieske	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Data Needs	Bill Keever	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
Financial Management				
Review Stormwater Expenditures to Other Departments	Evaluate PW Agreements and Costs, Including Street Sweeping, Street Overlay Program, Snow Removal, and Staff Time for Development Review.		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	<p>The rationale for expenditures to other departments is not documented, which is a gap. Aurora Water/Stormwater has numerous expenditures for expenses that may not be considered consistent with the mission of Aurora Water and/or Stormwater. While there may be solid reasons for these expenditures, a document explaining why Aurora Water is paying for the identified share would clear up any questions to staff, Council and ratepayers. The expenditures identified for this evaluation are listed in a separate table titled "Payments by Aurora Water/Stormwater to Other Departments".</p>
	Evaluate Other Expenditures such as: >Fire Hydrant Maintenance, >Pump Station Maintenance for Golf Courses, Sports Parks, and Hutchison Green Belt, >Public Information on Utility Bill Inserts, > Training Classes, > O & M of Irrigated Turf, >Irrigated Water for PROS & Golf, and >AEDC Support,		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input checked="" type="checkbox"/> Needs Further Study	
Internal Budget	Manage/Budget Interdepartmental Manpower, Equipment and Other Resources Transfers		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Included in the gap above.
	Bill Other Departments for Work Performed		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Included in the gap above.
	Review Invoices and Manage Disbursement of Funds to Proper Accounts		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Included in the 2 gaps above.
Life Cycle Cost	Evaluate Life Cycle and Implementation Costs for Capital, Maintenance, and Asset Management		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	<p>The major identified gap is the lack of a condition assessment for the City's stormwater system. The financial aspects of Life Cycle Cost will be added to this evaluation, but the overall work of Life Cycle Cost will be included in Asset Management. The Asset Management Function Matrix details the gaps within Asset Management.</p>
<b>REVENUES</b>				
Fee Evaluation	Evaluate Adequacy of User Fees	Janet Klink	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	<p>The most recent Fee Evaluation is included in the rate study completed by StepWise Utility Advisors completed in 2011. The rate study concluded that the rates and resulting revenues were adequate for the stormwater program at that time. <b>It is suggested a rate study be incorporated into Phase 3 of this study.</b></p>
	Evaluate Adequacy of Development Impact Fees		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	<p>The current MWH study is reviewing the adequacy of development fees.</p>
	Investigate Alternatives to Increase Fees, If Necessary	Dan Mikesell	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	<p>This may be completed in the periodic rate studies for stormwater, depending on the findings and scope of services for the rate studies. <b>Refer to the technical memo title Impervious Area Based Rate Structure Options completed as part of this study.</b></p>

Function	Sub Function	Individuals with Notable Responsibility	Sub function Status	Known Gaps and Notes
Administrate SW User Fees	Annually Update User Fee Database from County Assessor's Information and/or Water Billing Information		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	New users are added to the billing database as they come in from engineering.
	Verify Information with County Assessor		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	See Above
	Annually Add New Customers from Building Permit Records, if necessary.		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	See Above
	Update Growing Coverage Area and Schedule Aerial Imagery when necessary		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	See Above
	Create an Integrated and Updated Annual Billing Database from Above Sources		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	See Above
	Furnish Updated Database to Billing Department		<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	See Above
	Provide Customer Service for Billing Issues		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Oversee Fund Collection from SW User Fees and Transfer to Appropriate Accounts		<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Manage Collection of Late, Partial, and Non Payments		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
Development Impact Fees	Assess Impact Fees to new developments per building permits and other information		<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Added to billing database as new buildings come in from engineering.
	Revise Impact Fees to account for inflation and projects in new master plans		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Currently underway by MHW study. <b>This should be reviewed during Phase 3 of this study.</b>
	Oversee Impact Fee Account for Collection and Placement in development fund accounts		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
Funding Options	Review Aurora Stormwater Program Additional Funding Options		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input checked="" type="checkbox"/> Needs Further Study	<b>This is completed in the Tech Memo titled Impervious Area Based Rate Structure Options which is part of this report.</b>
Plan Review Fees	Consider Time Tracking for AW staff time and charging for Plan Reviews and associated expenses		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input checked="" type="checkbox"/> Needs Further Study	This may be a gap if it is considered necessary.



# Floodplain Management

Kevin Wegener, COA Floodplain Administrator

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Data Systems Utilized	Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
Tracking CLOMRs & LOMRs	Receive CLOMR and LOMCs requests, log into AMANDA, track comments (UDFCD), and review for completeness	Floodplain Administrator, City Engineer (Kevin Wegener)	AMANDA, ArcGIS	PW	N/A	N/A	Associate City Engineer, Plans Review Section (Bill McCormick)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		JV: Source and level-of-service columns have been hidden, Known Gaps column should be hidden or deleted as well after Gap Analysis Tech Memo is vetted.
Pond Certifications	Certify Pond Design and Construction with PM	Associate City Engineer, Plans Review Section (Bill McCormick)	AMANDA	PW	AW	Public Improvements Inspections (PII)	Associate City Engineer, Plans Review Section (Bill McCormick)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		GVM: This item needs to be coordinated with the Regulatory Function Matrix and Gaps
Floodplain Determination	Check floodplain status at building permit application or per special request	Floodplain Administrator, City Engineer (Kevin Wegener)	FEMA Floodplain Maps, FIS (PW hard copies)	PW	N/A	N/A	Associate City Engineer, Plans Review Section (Bill McCormick)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	An electronic process for tracking floodplain determinations needs to be set forth and responsibility/accountability established	Include FHADs, FEMA Studies and Other Studies, <i>W- Bill M. may have comments regarding the remaining gaps that will come in on the Gap Analysis Tech Memo which could change the 'Current Status' field from Needs Improvement to Functioning as Needed or Needs Further Study.</i>
Elevation Certificates	Review Certificates and Track Approvals	Floodplain Administrator, City Engineer (Kevin Wegener)	N/A	PW	N/A	N/A	Associate City Engineer, Plans Review Section (Bill McCormick)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Current Gaps include lack of an electronic filing system for elevation certificates (currently hard copy only), and no documented process exists for checking new floodplain delineations to determine where new elevation certificates are needed for properties that have been added to the floodplain	In the past when Dfirms have placed properties into the floodplain there have been approximately 500-1000 elevation certificates prepared by the City on behalf of property owners.
Flood Response Plan	Coordinate Flood Response Plan with Fire Dept and FEMA	City Engineer (Kevin Wegener)	N/A	Emergency Operations Center (EOC)	EOC, AW	N/A	Special Projects Managers (Jim Brown, Steve Clark), Associate City Engineer, Plans Review Section (Bill McCormick)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		GVM: This item needs to be checked versus the City's emergency response plan for gaps and possibly discussed with Joe McCleary
Information Management	Provide floodplain and drainage related documents	Associate City Engineer, Plans Review Section (Bill McCormick)	Oracle, UDFCD Web Map, COA Website	PW	AW Engineering	PW Engineering	Senior Engineer (Craig Perl)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Documents for individual properties are hard to find on the City's primary website. This should be rectified. The system needs to be updated as currently documents after 1998 may be in the system, but previous documents are not. See also items above for other data related gaps.	O&M
CRS- Community Rating System	Verify FEMA CRS-Community Rating System	Manager of Water Operations and Maintenance (Tom Ries)	N/A	PW	AW Operations	N/A	Manager of Water Operations and Maintenance (Tom Ries), Stormwater Superintendent (Joe McCleary), Associate City Engineer, Plans Review Section (Bill McCormick)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		Suggested Addition by TAC

Master Planning Sarah Young, Planning Services Manager													
Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Data Systems & Software Utilized	Level of Service		Dept & Div. with Primary Responsibility (dept/div)	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes	
				Existing	Target								
Manage Master Planning Program Element	Oversee All Planning Studies	Planning Services Manager	N/A	N/A	N/A	AW Planning	PW, Parks, Planning	AW Engineering, Project Delivery	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		(COA) We should consider just making sure that the gaps are reflected in the Gap Analysis Tech Memo and focus these matrices on roles & responsibilities.	
	Prioritize Planning Studies	**	N/A	Annual	Annual	AW	None	**	Kelly Neumann, Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	1. Studies are not ranked on economic/social/ environmental factors.		
												3. Consider risk based planning when prioritizing studies	
												4. Consider setting level of service relative to risk and cost	
												5. Add new criteria developed for prioritizing planning studies.	
												6. Add parameters needed for the CIP prioritization study.	
	Manage ISWMP Preparation and Updates	Planning Services Manager	N/A		Bi-Annual (?)	AW Planning	PW Engineering	AW Engineering, Project Delivery	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Currently no ISWMP in place, Phase 2 underway, Phase 3 to be scheduled, and updates subsequently	(COA) We need to decide on a final name for the infrastructure plan (ISWMP/SWMP?) and define acronyms (glossary table?) on Matrices where they appear.	
	Define Conditions That Warrant New Studies Or Revision Of Existing	**	SW Ops Maintenance Logs		Ongoing Evaluation	**	**	**	Sarah Young, Kevin Wegener, Bill McCormick	<input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Currently no defined conditions/criteria for revision of master plans(?)		
	Define Scope, Oversee Selection Of Consultant	**	N/A		As-Needed	**	PW Engineering, Purchasing Services	AW Engineering, Project Delivery, Business Services	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Need standardized and consistent consultant rating process and spreadsheet.	(COA) These are very similar, may be better off combined? Also move to UDFCD & Specialty Design report sections, combine with relevant items there?	
	Oversee RFP Process, Review Studies, Manage Referrals	**	Historical consultant rating spreadsheets		As-Needed	**	PW Engineering, Purchasing Services	**	Sarah Young, RB Simmons	<input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	**	**	
Manage or Oversee Schedules, Budgets, and Reviews	**	N/A		As-Needed	**	Purchasing Services	**	Sarah Young, Project Manager (As-Assigned)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		**		
									<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study				
Manage UDFCD & City Driven Master Plans (MDP, OSP, FHADS, etc.)	Requests And Reviews 5-Yr Proposed Planning Studies UDFCD	Planning Services Manager	N/A	Annual	Annual	AW Planning	PW Engineering	AW Engineering, Project Delivery, O&M	Sarah Young, Steve Fiori, Joe McCleary, Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	No standard/defensible process and participants for selecting 5-year basin planning proposals.		
	Manage Budget And Schedule for Individual Studies	UDFCD Senior Project Manager, Master Planning	N/A	Ongoing	Ongoing	UDFCD	AW Planning & Engineering, PW Engineering	N/A	Shea Thomas	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	City may need to complete more studies and updates than the UDFCD budget allows. These studies would be funded and managed by the City. UDFCD may be able to manage some of these studies if they have available project managers.		
	Participate In Scoping And Consultant Selection	**	N/A	As-Needed	As-Needed	**	PW Engineering	AW Engineering, Project Delivery	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Provide Public Involvement And Education	Public Relations Manager		None (?)	As-Needed	AW Public Relations?	N/A	AW Planning, Water Conservation?	Greg Baker	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	We don't currently do this with respect to master planning, to my knowledge.		
	Coordinate With Floodplain Administration	City Floodplain Administrator	N/A	As-Needed	As-Needed	PW Engineering	AW Planning & Engineering	N/A	Kevin Wegener, Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Coordinate With MS4 Permit To Ensure Reqmts. Are In Plans	Regulatory Compliance Manager?	N/A	As-Needed	As-Needed	AW Regulatory Compliance	N/A	AW Planning, Engineering, Project Delivery, Regulatory Compliance	Sean Lieske	<input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	No established pipeline/process for MS4 review of UDFCD master plans.		
	Coordinates With 404 Permits For Location And Design Issues.	Project Delivery Services Manager and Project Manager (As-Assigned)	National Wetlands and Surface Waters Maps	As-Needed	As-Needed	AW Project Delivery	N/A	AW Planning, Engineering, Regulatory Compliance, O&M	Steve Fiori, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	No established pipeline/process for 404 review of UDFCD master plans.	Does UDFCD have a process or scope item for considering 404 issues during planning?	
	Coordinate With O & M For Maintenance Related Design Issues.	Stormwater Superintendent	N/A	As-Needed	As-Needed	AW SW O&M	N/A	AW Planning, Engineering, Project Delivery	Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	No established pipeline/process for O&M review of UDFCD master plans.	O&M is frequently called upon for information and review of basin master plans, but could be more integrally involved in review.	
	Coordinate With Land Acquisition For Siting Issues.	Real Property Services Manager?	County Assessor's Database	As-Needed	As-Needed	PW Real Property	AW Planning & Engineering	N/A	Joani Cravens	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	This is something that doesn't seem to be very well coordinated and can result in missed opportunities, higher costs, etc.		
	Coordinates With Streets Department And CDOT	City Engineer	N/A	As-Needed	As-Needed	PW Engineering	CDOT, AW Planning & Engineering	N/A	Kevin Wegener	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	No designated CDOT contact for planning-related issues. ?	These issues are probably all being relayed through the PW rep for each UDFCD planning study (i.e. Bill McCormick).	
	Coordinates With Parks And Open Space	PROS Principal Planner	N/A	As-Needed	As-Needed	PROS Planning	AW Planning & Engineering, PW Engineering	N/A	Curtis Bish	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Coordination with Parks needs to be implemented earlier in the process of plans with which current or future Parks property is involved.		
	Coordinates With All Utilities	Misc Utility Reps	Public Utility Maps	As-Needed	As-Needed	Various	AW Planning & Engineering	N/A	Various	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Coordination with outside utilities should be the responsibility of the master plan consultant?		
	Regular Project Meetings To Review Work, Schedule, And Budget.	Planning Services Manager	N/A	As-Needed	As-Needed	AW Planning & Engineering	PW Engineering	N/A	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		(COA) Repeat?	
	Complete Draft Study For Review	UDFCD Senior Project Manager, Master Planning	Dropbox	As-Needed	As-Needed	UDFCD	AW Planning & Engineering, PW Engineering	N/A	Shea Thomas, AW Project Manager (As-Assigned)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
Revise Draft Report And Publish Final Report	**	UDFCD Electronic Data Management Map	As-Needed	As-Needed	**	N/A	N/A	Shea Thomas	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study				
	Provides Asset-Management-Information-To-Study-Team	Planning-Services-Manager	AW-GIS-SDE-Info	As-Needed	As-Needed	AW Planning & Engineering	N/A	N/A	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Provides Master Development Drainage Plans And Other Documents Related To Study Area To Study Team.	**	AMANDA, AW Engineering Paper Files	As-Needed	As-Needed	**	PW Engineering	N/A	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	After Study is Completed Evaluate Master Plans and Generate List of Future CIP Projects, Enter into DMP	**	ISWMP			AW	PW, AP	O&M	Sarah Young, Steve Fiori, Joe McCleary	<input type="checkbox"/> Functioning as Needed		We need to be sure that th	
Manage Specialty Design Reports	Manage Special Design Reports	Engineering Services Manager	N/A	Ongoing	Ongoing	AW Planning & Engineering	PW Engineering?	AW Project Delivery Services	Vern Adam	<input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Coordinates With Appropriate Departments	**	N/A	As-Needed	As-Needed	**	PW, PROS, Planning, ODA	AW Project Delivery Services, O&M, Regulatory, Business Services	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Manage Budget And Schedule for Individual Studies	**	N/A	Ongoing	Ongoing	**	N/A	AW Project Delivery Services	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Participate In Scoping And Consultant Selection	**	Consultant Selection Spreadsheet	As-Needed	As-Needed	**	PW Engineering	**	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Provide Public Involvement And Education	Public Relations Manager?		As-Needed	As-Needed	AW Public Relations?	N/A	AW Planning, Water Conservation?	Greg Baker	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Coordinate With Floodplain Administration	City Floodplain Administrator	N/A	As-Needed	As-Needed	PW Engineering	AW Planning & Engineering	N/A	Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			

**Master Planning**  
Sarah Young, Planning Services Manager

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Data Systems & Software Utilized	Level of Service		Dept & Div. with Primary Responsibility (dept/div)	Cross Departmental Coordination (Department)	Inner Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
				Existing	Target							
	Coordinate With MS4 Permit To Ensure Reqmts. Are In Plans	Regulatory Compliance Manager?	N/A	As-Needed	As-Needed	AW Regulatory Compliance	N/A	AW Planning, Engineering, Project Delivery, Regulatory Compliance	Sean Lieske	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinates With 404 Permits For Improvement Location And Design Issues.	Project Delivery Services Manager?	National Wetlands and Surface Waters Maps	As-Needed	As-Needed	AW Project Delivery	N/A	AW Planning, Engineering, Regulatory Compliance, O&M	Steve Fiori, Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinate With O & M For Maintenance Related Design Issues.	Stormwater Superintendent	N/A	As-Needed	As-Needed	AW SW O&M	N/A	AW Planning, Engineering, Project Delivery	Joe McCleary	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinate With Land Acquisition For Siting Issues.	Real Property Services Manager?	County Assessor's Database	As-Needed	As-Needed	PW Real Property	AW Planning & Engineering	N/A	Joani Cravens	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinates With Streets Department And CDOT	City Engineer	N/A	As-Needed	As-Needed	PW Engineering	CDOT, AW Planning & Engineering	N/A	Kevin Wegener	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinates With Parks And Open Space	PROS Principal Planner	N/A	As-Needed	As-Needed	PROS Planning	AW Planning & Engineering, PW Engineering	N/A	Curtis Bish	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Coordinates With All Utilities	Misc Utility Reps	Public Utility Maps	As-Needed	As-Needed	Various	AW Planning & Engineering	N/A	Various	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Regular Project Meetings To Review Work, Schedule, And Budget.	Engineering Services Manager	N/A	Ongoing	Ongoing	AW Planning & Engineering	PW Engineering	N/A	Vern Adam	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(COA) Repeat - combine with item three in this section?	
Manage IGA and Annexation Related Master Studies & Commitments	Coordinate With Planning and Public Works To Identify and Track IGA & Annex. Agreements	Planning Services Manager	IGA Tracking Spreadsheet		Ongoing	AW Planning & Engineering	PW Engineering, Real Property, Planning & Development	N/A	Planning Services Manager (Sarah Young)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	IGA/Annexation agreement tracking process is poorly understood/documentd.	
	Identify IGAs and Annexations with Master Planning Implications	**	**		Ongoing	**	PW Engineering	N/A	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Add Annexation and IGA Related Master Planning to Overall Prioritization	**	**		Ongoing (?)	**	N/A	N/A	Kelly Neumann, Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
Provide Staffing Resources and Systems	Provide Staff Training	Planning Services Manager	N/A	Annual Plan	Annual Plan	AW Planning & Engineering	PW Engineering	AW Project Delivery, O&M	Sarah Young	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Schedule Staff Activities	**	N/A	Ongoing	Ongoing	**	N/A	N/A	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Evaluate Staffing Needs and Track Staff Productivity	**	N/A	Ongoing	Ongoing	**	N/A	AW Project Delivery Services	**	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Provide Staff Supervision	**	N/A	Weekly	Weekly	**	PW Engineering	AW Project Delivery Services	Sarah Young, Bill McCormick	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Manage HR Functions	**	N/A	As-Needed	As-Needed	**	N/A	Human Resources	Sarah Young, Sheri Martin	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Establish Levels of Training for All Staff	**	N/A	Annual	Annual	**	N/A	AW Project Delivery Services	Kelly Neumann, Sarah Young, Steve Fiori	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
											<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	

**Operations and Maintenance**  
Joe McCleary, Stormwater Superintendent

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Where Documented or Studied	Data Systems Utilized	Level of Service		Dept. with Primary Responsibility	Cross Departmental (Department)	Inter Departmental Coordination (Group/Division)	Individuals with Notable Responsibility	Current Status	Known Gaps	Notes
					Existing	Target							
Maintain Conveyance Systems	Inspect and Maintain Open Channel Banks and Bottoms	SW Supervisors, note: Inspection done by OC maintenance by SW	AW - PW MOU	Spreadsheet	80% of earthen channels (61 miles) and 100% of concrete channels (9 miles)	80% of earthen channels (61 miles) and 100% of concrete channels (9 miles)	AW-OPS UDFCD	N/A	OPS Compliance	Stormwater Superintendent (Joe McCleary), Environmental Inspection Coordinator (Geoff Rabinowitz)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		See UDFCD Meeting Notes, See Also Stream Management Plan, and Sedimentation Items Below
	Inspect & Maintain Public Conduits	SW Superintendent and SW Supervisors	AW - PW MOU AW Ops Plan 2013		not defined	not defined	AW-OPS	N/A	Stormwater Infrastructure CCTV and Manned Entry Inspections, AW Engineering	Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	The process for maintaining and inspecting these should be standardized (note that inspection is an Asset Management function)	CMP assessment completed, RCP assessment starts Nov 2014 and continues into future if funding approved
	Maintain Inlets and Flap Gates	SW Supervisors	AW-PW MOU, AW Ops Plan 2013		Inlets when needed, flap gates quarterly	Same	AW-OPS			Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Maintain Curbs, Gutters, and Sidewalks	Manager of Public Works Operations (Chris Carnahan)	AW - PW MOU				PW-STREETS OPS			Manager of Public Works Operations (Chris Carnahan)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Repair Crosspans and Inlet Transitions	PW Design Engineer (Raul Griego) and Stormwater Superintendent (Joe McCleary)	AW - PW MOU	tracked on PW spreadsheet	as needed and when budget permits		PW-STREETS OPS	PW	N/A	PW Design Engineer (Raul Griego) and Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Cross pans need to be added to the MOU	PW coordinates replacements, SW provides funding, coordinated with pavement improvement operations
	Maintain Chase Drains	SW & Streets Supervisors	AW - PW MOU	map books	as needed		PW-STREETS OPS	PW	N/A	Manager of Public Works Operations (Chris Carnahan), Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		SW responsibility if drains to a SW asset, otherwise PW responsibility
	Repair and Clean Inlet Boxes	SW Superintendent and SW Supervisors	AW-PW MOU, AW Ops Plan 2013		when inspections identify need	same	AW-OPS	PW	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Clean Trash From Inlet Grates in Street	Streets responsibility as identified in MOU	AW - PW MOU, AW Ops Plan 2013				PW-STREETS	N/A	N/A	Manager of Public Works Operations (Chris Carnahan)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Clean Culverts and Pipe Outlets in Ditches	SW supervisors	AW - PW MOU		not defined		AW-OPS	PW	N/A	Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Need to add to the info data a list of outfalls that require cleaning	
	Repair Roadside Ditch Riprap, Including Excavating Sediment and Debris		AW - PW MOU		As-needed		AW-OPS	PW-STREETS	N/A	Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Need to update MOU with additional clarification to define who is responsible for roadside ditches; Need tour to review field conditions	
	Maintain Private Conduits	Private Owner	AW - PW MOU				Private Owner	N/A	N/A	N/A	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Need better process of establishing which conduits are City responsibility. Need to inform property owners of their responsibilities - (Joe M). GIS info often incorrect and private assets are identified as COA.	Possibly by providing ownership field in GIS or other programs
	Maintain Bridge Components		AW - PW MOU				PW-STREETS OPS			Associate City Engineer (Bill McCormick), Manager of Public Works Operations (Chris Carnahan)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Maintain Channels Under Bridges	SW superintendent and SW supervisors	AW - PW MOU	Infor	as needed		AW-OPS	PW	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		SW activities coordinated with PW engineering
	Maintain Manholes in Streets	Manager of Water Operations and Maintenance (Tom Ries)	AW - PW MOU, & AW IP 2012	Infor	as needed		AW-T&D	N/A	AW-OPS	Stormwater Superintendent (Joe McCleary) and Water T&D Superintendent (Gary Edwards)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Does this need to be re-evaluated?	AW pays for or performs adjustment on water valves and manholes. AW pays part of inspections for utility repairs
	Provide Snow Removal on Public Property	SW supervisors and other AW supervisors	AW - PW MOU, AW IP 2012	Infor	as needed		PW STREETS OPS, AW-OPS	PW	numerous	Manager of Public Works Operations (Chris Carnahan), Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Needs to be re-evaluated.	AW provides approx 40% of equipment and workforce to assist in snow removal. Parks provides snow removal on trails. See Aurora Water, Snow Removal Policy.
	Provide Snow Removal on SW Property	SW supervisors	Snow Plan	Infor	as needed					Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Provide Street Sweeping	Manager of Public Works Operations (Chris Carnahan)	AW IP 2012				AW-OPS			PW Streets manager sweeping	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		Street sweeping with be fully funded by AW wastewater fund due to water quality requirements
	Maintain Drainage Easements and ROW	SW supervisors	AW-PW MOU, AW Ops Plan 2015	Infor	maintain 2x per year	same	AW-OPS		N/A	Stormwater Superintendent (Joe McCleary)	Functioning as needed		
Maintain Detention and Water Quality Control Features and Erosion Control	Initially Certify Private MS4 Permit Ponds (post construction)				When constructed		AW	PW	Regulatory	PW Engineering, AW Engineering	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		See flowchart for ponding certifications - Note, this item is also shown on the Regulatory FM.
	Annually Certify Private MS4 Permit Ponds	Environmental Inspection Coordinator (Geoff Rabinowitz)			Annually		AW		Regulatory		<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		Note: This item is also shown on the Regulatory Function Matrix.
	Maintain Public Detention Facilities	SW superintendent and SW supervisors	AW - PW MOU AW Ops Plan 2015	Infor	Monthly	same	AW	no	no		<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	SW staff receiving training about operation and maintenance required for permanent BMPs thru CSU SW Center	
	Prioritize Pond Maintenance Activities and Schedule Work	SW supervisors	Stormwater Organizational Chart, Meetings, AW Ops Plan 2015	Spreadsheet, Infor			AW		Regulatory, if MS4		<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		
	Maintenance of Private Ponds	Private Owner								Environmental Inspection Coordinator (Geoff Rabinowitz)	<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Various gaps exist relative to private pond maintenance - owners don't know what their responsibilities are, inspection intervals have not been set, GIS system doesn't include all ponds and ownerships, and City Code doesn't include language providing for citation and fining owners for unmaintained facilities.	Current ordinance addresses ponds built after 2008 but is silent with respect to ponds built prior to that date.
	Inspect and Document Maintenance Needs Annually	SW superintendent and SW supervisors	Stormwater Organizational Chart, Meetings, AW Ops Plan 2015	Spreadsheet	continual		AW		Regulatory, if MS4		<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		[W]: Ensure that there aren't duplicates re: pond maintenance issues between this and the other FM's.

Operations and Maintenance  
Joe McCleary, Stormwater Superintendent

	Position (Title) Responsible for Managing and Implementing Sub	Where Documented or	Data Systems	Level of Service	with Primary Responsibility	Departmental	Departmental (Division)	Individuals with Notable				
Manage Stream Corridors (it may make more sense to develop an overall plan for stream corridors in general, then develop individual plans as specific problems are encountered)	Develop O&M Plan for Each Stream Corridor	SW Superintendents and SW Supervisors	Integrated Stream Management Plan (ISMP)		AW	UDFCD, PROS	N/A	Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	The Integrated Stream Management Plan stops short of identifying tasks to be performed and assigning responsibilities	Development of the O&M Plans for the ISMP were in Progress as of 2012. Progress needs to be updated	
	Develop Post-Control Plans for Each Stream Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		-	
	Develop Tree Mitigation Plans for Each Corridor		ISMP, AW, Ops. Plan 2013						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Develop Wetlands Management Plans for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Need to add a layer for identified and mapped wetlands within the GIS system if it does not exist. A citywide wetlands survey may be warranted if it has not been completed.		-
	Develop Vegetation Plan for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Develop Wildlife Management Plan for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Develop Woody Management Plan		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Execute O&M Plan Tasks for Each Stream Corridor	SW Superintendent and SW Supervisors	ISMP			AW OPS	UDFCD, PROS	N/A	Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		Specific tasks need to be identified from the ISMP and information provided in columns to the left
	Execute Post-Control Tasks for Each Stream Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Execute Tree Mitigation Tasks for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Execute Wetlands Management Tasks for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
	Execute Vegetation Tasks for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-
Execute Wildlife Management Tasks for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-	
Execute Woody Management Tasks for Each Corridor		ISMP						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			-	
Provide Spill Response Activities	Provide Spill Response Training	Environmental Permitting Manager (Sean Lieske)	Spill Response Information		AW			Environmental Inspection Coordinator (Geoff Rabinowitz)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		(JV) This section needs to be checked with Sean L and Geoff R. - spill response is a regulatory function primarily as well, part of MS4 permit - move there?	
	Respond to Spills in Accordance with Response Plan	Environmental Permitting Manager (Sean Lieske)	Spill Response Information		AW			Environmental Inspection Coordinator (Geoff Rabinowitz) and Operations Compliance Staff	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Provide Spill Record Keeping	Environmental Permitting Manager (Sean Lieske)	Spill Response Information		AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Meet Safety Requirements	All SW Staff	Spill Response Information		AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Update Spill Response Plan	Environmental Permitting Manager (Sean Lieske)			AW			Environmental Inspection Coordinator (Geoff Rabinowitz)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
Provide Sediment Management in Drainage Channels	Prioritize and Schedule Channel Inspections	Environmental Inspection Coordinator (Geoff Rabinowitz) and Stormwater Superintendent (Joe McCleary)	Sediment Management Plan (SMP), 2010	N/A	N/A	AW	N/A	OC	Environmental Inspection Coordinator (Geoff Rabinowitz) and Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	30% or greater blockage of culverts initiates inclusion on list for cleaning	
	Provide Channel Inspections at Given Interval	Environmental Inspection Coordinator (Geoff Rabinowitz)	SMP 2010			AW	N/A	OC	Environmental Inspection Coordinator (Geoff Rabinowitz) and Stormwater Superintendent (Joe McCleary)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JM): Geoff R. needs to be consulted for any additional details of this sub-function (i.e. LOS).	
	Document Channel Inspection Results	OC Staff, Environmental Inspection Coordinator (Geoff Rabinowitz), Stormwater Superintendent (Joe McCleary)	SMP 2010	SW Excel spreadsheet			AW	N/A	OC	Stormwater Superintendent (Joe McCleary) and OC Staff	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JM): Stormwater Ops developing a PDF inspection report form.
	Provide a Periodic Risk Assessment of Flooding due to Aggradation	Stormwater Superintendent (Joe McCleary) and Floodplain Manager (Kevin Wegener)	SMP 2010				AW	PW	AW Engineering	Associate City Engineer (Bill McCormick), Stormwater Superintendent (Joe McCleary), and Engineering Services Manager (Vacant)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JV): There needs to be some discussion of the gaps related to this function in the Tech Memo. (JM): This is a floodplain management function?
	Survey Aggradation Areas	Stormwater Superintendent (Joe McCleary) and Engineering Services Manager (Vacant)	SMP 2010				AW	PW	AW Engineering	Stormwater Superintendent (Joe McCleary) and Engineering Services Manager (Vacant)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	The City needs a stronger method for assessing vegetation and degradation/aggradation in channels, as well as a method for documenting planned and modeled vegetation for each channel.
	Prioritize and Schedule Sediment Removal Projects	Stormwater Superintendent (Joe McCleary), Planning Services Manager (Sarah Young)					AW	PW	AW Engineering	Stormwater Superintendent (Joe McCleary), Associate City Engineer (Bill McCormick)	<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Additional information is needed to develop future plans, activities have been scaled down to small sediment removal projects due to permitting issues.
										<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study		

Operations and Maintenance  
Joe McCleary, Stormwater Superintendent

	Position (Title) Responsible for Managing and Implementing Sub	Where Documented or	Data Systems	Level of Service	with Primary Responsibility	Department (Department)	Department (Department)	Department (Department)	Individuals with Notable		
Provide Other Maintenance Activities	Provide Fall Protection	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors				AW	PW, PROS	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JM): 30' drop within 30' of trail/sidewalk/etc.
	Provide Graffiti Removal on Channels and Structures	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors	AW Ops Plan 2013	2x per week if needed	2x per week if needed	AW	APD, PROS	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Install and Maintain Gates and Fences	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors	AW Ops Plan 2013	As-Needed	As-Needed	AW	PROS	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Provide a Periodic Risk Assessment of Flooding due to Aggradation	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors	AW Ops Plan 2013							<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JV/IM): This is a duplicate.
										<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
Critical Infrastructure Maintenance, Flap Gate & Erosion Control Maintenance	Levee System Certification	Stormwater Superintendent (Joe McCleary)	AW Ops Plan 2013			AW Supply Division's Dam Insp. Group	N/A	AW Engineering	Stormwater Superintendent (Joe McCleary), Engineering Services Manager (Vacant)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Recertification of Sand Creek Levee required in 2020 activities related to recert should start in 2017
	Dam Maintenance for 3 Dam structures	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors	AW Ops Plan 2013	Monthly and after significant rain events	Monthly and after significant rain events	COA Stormwater Division	N/A	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JV): Specify the '3 Dam Structures' (Southshore, Jewel, & Expo?)
	Flap Gate Maintenance for 11 Flap Gates	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors	AW Ops Plan 2013	Quarterly	Quarterly	COA Stormwater Division	N/A	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Aurora-Owned Dam and Levee Inspection	Stormwater Superintendent (Joe McCleary)		Annually	Annually	AW	State	AW SOS: Cully	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	
	Erosion Control for Maintenance Activities	Stormwater Superintendent (Joe McCleary)	AW Ops Plan 2013	As-Needed	As-Needed	COA Stormwater Division	N/A	N/A	Stormwater Superintendent (Joe McCleary)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JV): This is redundant with earlier erosion-control sub-function?
Kelly Rd. Dam Inspections & Maintenance	Stormwater Superintendent (Joe McCleary) and Stormwater Supervisors	AW Ops Plan 2013	Infor	Monthly and Annual Inspections		COA SW	State, USACE	USACE, UDFCD, Lowry	Stormwater Superintendent (Joe McCleary), Water Maintenance Supervisor (Mike Earnest)	<input checked="" type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	(JM): New sub-function since COA is sponsor, not owner of Kelly Rd (Lowry is) so handled differently.

Gaps Identified:

Per Phase 1 Study, Increase efficiency in inspections  
 Per Phase 1 Increase efficiency in data management  
 The City may want to consider combining several of the guidance documents cited herein

**Regulatory Program Element  
Function Matrix**  
Jill Piatt-Kemper, Manager

Function	Sub Function	Position (Title) Responsible for Managing and Implementing Sub Function	Source, Where Documented or Studied	Data Systems Utilized	Level of Service		Dept. with Primary Responsibility	Cross Departmental Coordination (Department)	Departmental Coordination (Department)	Individuals with Notable Responsibility	Current Status	Known Gaps	EPA Recommendations	Notes
					Existing	Target								
Provide Resources and Systems Needed to Prepare and Update Documents Such as the MS4 Permit and Other Stormwater Regulations	Evaluate staff needs relative to the Regulatory Environment						AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	See EPA Audit for full explanation of "required corrective actions" which may be considered as gaps.	See EPA Audit for a full explanation of EPA Recommendations.	
	Purchase and Maintain Equipment Related to Regulations						AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	The deliverables from Phase 3 should present work flow options for achieving MS4 compliance, and sharing data with other agencies.		
	Provide Public education and outreach on stormwater impacts		EPA				AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	City needs to raise awareness regarding elements in the city code or policy related stormwater practices that the City may want to consider revising in order to facilitate a more effective overall stormwater program/business plan including recommendation regarding potential changes to City code that would address recurring issues with lot drainage, water quality, appearance and functionality of drainage facilities.	The City should evaluate the effectiveness of its outreach to the private development community and identify ways to more effectively promote the inclusion of LID BMPs in private development design proposals. (EPA Audit)	
	Organize and Manage Public Involvement/Participation		EPA				AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
	Respond to New Regulations, Permit Updates and Audits		EPA				AW	PW	OPS		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	The Aurora SWMP should address options for achieving compliance with future statewide and national regulations		
	Prepare and Update I & M Plans										<input type="checkbox"/> Functioning as Needed <input checked="" type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	I&M Plan template needs to be revised; lack of enforcement by the City for I&M plans not submitted; staff training about I&M plans needs to be conducted; pond certification process needs to be better defined; annual inspections are not being conducted; annual reports are not being submitted by the Responsible Party; enforcement of annual reports is not being conducted by the City	EPA Audit; Meeting with City Regulatory Staff on 8/27/14	
	Manages and coordinates 404 permits		AW SW Org Chart				AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study			
Provide Maintenance, Inspection and Reporting Related to Regulations	Initially Certify Private MS4 Permit Ponds (post construction)				When constructed		AW	PW	Regulatory	PW Engineering, AW Engineering				
	Annually Certify Private MS4 Permit Ponds	Environmental Inspection Coordinator (Geoff Rabinowitz)			Annually		AW		Regulatory					
	Respond to Illicit connections, spills, and discharge detection		AW SW Org Chart and EPA				AW	PW, AP	OPS		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Aurora would like (someday) to provide a GIS of basin/system/drainage connectivity between all elements to be able to track discharge		Meeting with City Regulatory Staff on 8/27/14
	Process Extension Agreements						AW	PW, AP			<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	Extension Agreements currently change too many hands and do not have one central storage location		Meeting with City Regulatory Staff on 8/27/14
	Provided Employee Training						AW				<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	City needs to provide sufficient employee training to help facilitate the implementation of spill response, illicit discharge detection, identification of non-stormwater discharges, etc.		Stormwater Awareness Training Presentation
	Document work that is being conducted on channels										<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	There are elements of work that is done on channels that is not currently tracked by Public Works		Meeting with City Regulatory Staff on 8/27/14
	Post-construction stormwater management in development/redevel.		EPA				AW	PW	OPS		<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study	I&M Plan template needs to be revised; lack of enforcement by the City for I&M plans not submitted; staff training about I&M plans needs	EPA Audit; Meeting with City Regulatory Staff on 8/27/14	
Erosion Control Inspections		AW SW Org Chart		AW						<input type="checkbox"/> Functioning as Needed <input type="checkbox"/> Needs Improvement <input type="checkbox"/> Needs Further Study				

Note: the minimum measures that didn't fit with existing Aurora functions listed on the AW SW Org Chart were listed under Jill Piatt-Kemper's responsibility. Some minimum measures were assigned to existing Aurora functions on a best fit basis, it is unknown if those Functions included all portions of that minimum measure. All of the tasks of the minimum measures are not listed, but will be included in the next version of this document.