NOTICE OF INTENT

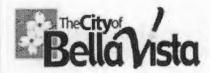
FOR DISCHARGERS OF STORMWATER RUNOFF

ASSOCIATED WITH REGULATED SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS AUTHORIZED UNDER NPDES GENERAL PERMIT ARR040000

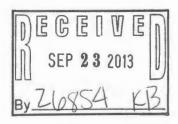
I.	PERMITTEE INFORMATIO	N New ⊠	Renewal [(Pe	ermit Tracking Numb	er ARR04)
	Regulated Small MS4 Name:	City of Bella Vista		Own	er Type:
	Mailing Address:	P.O. Box 5655		FEDERAL	☐ STATE
	Actual Street Address:	406 Town Center West		🖾 PUBLIC	OTHER
	City:	Bella Vista		Urbanized Area	
	State:	Arkansas Zip: 7271	4	County(ies):	Benton
	Enter the Latitude and Longitu	de of the approximate center of the	e Small MS4 (A n	nap must be included	ECEIVE
	Small MS4 Latitude:	36 degrees 27	minutes	44 seconds	SEP 2 3 2013
	Small MS4 Longitude:	94 degrees15	minutes	42 seconds	J 521 20 2015
II.	PERMITTEE CONTACT IN	FORMATION		Ву	12089
	Name: Frank E. Anderson		Telephone	: 479-876-1255	
	Title: Mayor		Email Address:	mayorfrank@bellav	ristacityar.com
III.	INVOICE MAILING INFOR	MATION			- 10 to 10 t
	Invoice Contact Person:	Allison Fusillo		City: Bella Vista	
	Invoice Mailing Company:	City of Bella Vista		State: Arkansas	Zip: _72714
	Invoice Mailing Address:	P.O. Box 5655	Telep	hone: 479-876-1255	
	purposes of Part VI.H of the g officer of the agency, or (ii) a sunit of the agency (e.g., Regiona "I certify that the cognizant of under the provisions of 40 CFI accept reports signed by the appropriate of the information submitted. Baresponsible for gathering the interpretation of the information submitted.	fficial designated in this Notice of R 122.22(b). If no cognizant office plicant. I certify under penalty of accordance with a system designed ased on my inquiry of the person formation submitted is, to the best penalties for submitting false information. Name: Frank E. Anderson	ve officer of a Fe sponsibility for the function of a fee sponsibility for the function of the	ederal agency includes e overall operations of ed to act as a dully augnated, I understand the ment and all attachmentalified personnel proper manage the system, or e and belief, true, accura- ing the possibility of fine	(i) the chief executive a principal geographic atthorized representative at the Department will ats were prepared under orly gather and evaluate those persons directly ate, and complete. I am
	COGNIZANT OFFICIAL DI				
٠.		me: Christopher Suneson, PLA	Title:	Director of Planning. F	Building, Code Enforce
	Cognizant Official Signat			09/13/13	
	Teleph			csuneson@bellavistaci	tyar.com
VI.	PERMIT REQUIREMENT N Submittal of Complete N Submittal of Complete Stormw Management Progra	OI? Yes No		Submittal of MS4 map	? ⊠ Yes □ No

2013

City of Bella Vista



Prepared by: Planning, Building and Code Enforcement Department



STORM WATER MANAGEMENT PLAN

September 2013 Permit ARR040041

Table of Contents

Table of Contents

Table of Contents 1
Section I: General Information 4
Background and Context4
Description of Permit Area4
Purpose of Plan4
Scope and Areas of Focus5
Pollution incidents and unlawful (illicit) discharges to the City's stormwater drainage system.5
On-site management of stormwater to reduce the quantity of stormwater and pollution entering the drainage system.
Reduction and prevention of pollution at City facilities and resulting from City activities and business practices
Public education geared toward broad community stewardship of water resources
Public awareness and involvement in the City's Stormwater management program
Targeted infrastructure improvements and maintenance programs to improve water quality and restore high priority areas6
ADEQ Required Municipal Separate Storm Sewer System (MS4) Plan elements
Overview of Bella Vista's Stormwater Drainage Systems
Stormwater Drainage Basin Characteristics
Section II: Goals, Policies, and Implementation Actions 9
Goal 1: Protect Citizens and Property from Flooding
Policies

Implementation Actions......9

Implementation Actions.......10

Policies......11

Goal 3: Preserve and Maintain Surface Waters, Wetlands, and Riparian Areas.....11

Goal 2: Improve Surface and Sub-surface Waters for Aquatic Life and Other Beneficial Uses10

	Policies	12
	Implementation Actions	12
	Goal 5: Urban Drainage Ways Become Community Amenities	13
	Policies	13
	Implementation Actions	13
Se	ction III: Municipal NPDES MS4 Plan 14	
	Stormwater Management Program – Responsible Parties	14
	City of Bella Vista Organizational Chart	14
	NPDES Phase II BMP Requirements	14
	Minimum Control Measure #1: Public Education and Outreach	15
	Permit Requirements	15
	Applicable City BMPs	15
	BMP Explanation	15
	Rationale	16
	Responsible Parties	17
	Summary of Measurable Goals	17
	Development/Implementation Schedule Summary	18
	Minimum Control Measure #2: Public Involvement and Participation	23
	Permit Requirements:	23
	Applicable City BMPs	23
	BMP Explanation	23
	Rationale	23
	Responsible Parties	24
	Summary of Measurable Goals	24
	Summary of Development/Implementation Schedule	25
	Minimum Control Measure #3: Illicit Discharge Detection and Elimination	27
	Permit Requirements:	27
	Applicable City BMPs	28
	BMP Explanation	28
	Rationale	29
	Responsible Parties	30

Summary of Measurable Goals	30
Summary of Development/Implementation Schedule	31
Minimum Control Measure #4: Construction Site Runoff Regulations and Controls	36
Permit Requirements:	36
Applicable City BMPs	37
BMP Explanation	37
Rationale	38
Responsible Parties	39
Summary of Measurable Goals	39
Summary of Development/Implementation Schedule	40
Minimum Control Measure #5: Post-Development Construction Standards	45
Permit Requirements:	45
Applicable City BMPs	45
BMP Explanation	45
Rationale	47
Responsible Parties	47
Summary of Measurable Goals	47
Summary of Development/Implementation Schedule	48
Minimum Control Measure #6: Operation Maintenance for Pollution Prevention in M Operations	
Permit Requirements:	54
Applicable City BMPs	54
BMP Explanation	55
Rationale	55
Responsible Departments	57
Summary of Measurable Goals	57
Summary of Development/Implementation Schedule	58

Section I: General Information

Background and Context

The Bella Vista Stormwater Management Plan (Stormwater Plan) has been developed to provide policy and management guidance for activities affecting stormwater throughout the City of Bella Vista (The City). It is intended to help the City fulfill certain State and Federal water quality requirements, and to meet local water resources management objectives. Through the implementation of the policies and management practices embodied in the Stormwater Plan over time, Bella Vista hopes to preserve urban stormwater quality that negatively impacts local rivers and streams, and to develop and preserve the urban drainage infrastructure in a manner that meets the community's needs for years to come.

While the State and Federal regulatory programs place significant emphasis on improving water quality and the health of Arkansas's watersheds, Bella Vista, as part of the Elk River (Little Sugar Creek) Watershed, further emphasizes the need for local management of urban stormwater and waterways. It becomes even more important that management of these resources occur in a manner that minimizes destructive long-term impacts to drainage infrastructure and the natural features that help protect water quality and control flooding.

Description of Permit Area

According to the 2010 United States Census, Bella Vista currently serves a population of 26,461 residents within the City limits. The geographic boundaries of the MS4 plan are the City limits and the service area for stormwater planning encompasses approximately 46 square miles. Only a portion of the municipal limits is contained within the urbanized area as defined by the 2010 census. Based on the urbanized area delineated by the US Census Bureau, eastern and western portions of Bella Vista fall outside of the urbanized area. The City has completed authority and responsibility for planning, building, operating, maintaining, and regulating the stormwater drainage system within the City limits, but not in any of the Planning Area that are outside of the City limits. Therefore, the MS4 NPDES permit for which this MS4 plan is submitted covers only the area within Bella Vista's municipal boundary.

Purpose of Plan

The purpose of the Stormwater Plan is threefold: First, the Stormwater Plan characterizes the City's entire stormwater drainage system, including both the open and piped systems, their connections to the streams, and the overall condition of the system. This characterization is necessary to address relevant State and Federal regulatory requirements and it provides baseline information on which to develop focused stormwater management strategies. Second, the Stormwater Plan establishes goals, policies, and implementation actions that will achieve the City's long-term objectives in a way that is understandable to the public, usable by City staff, and meets regulatory needs. Finally, the

Stormwater Plan establishes a means for measuring, reporting, and adaptively managing the City's water resources, by presenting benchmarks that will ensure meaningful progress, as well as ensuring compliance with applicable laws and permit requirements.

Scope and Areas of Focus

The Stormwater Plan addresses stormwater quality management policies and management practices that are be implemented in the City. The scope of the Stormwater Plan is determined primarily by the Federal MS4 permit requirements, but is intended to address local water resources issues as well. These areas of focus in the Stormwater Plan include:

Pollution incidents and unlawful (illicit) discharges to the City's stormwater drainage system.

These discharges can be systematic (recurring) or episodic (occasional or one-time) discharges, and include pollutant runoff from parking lots, discharges from industrial outfalls, accidental spills, poor construction site management, and a variety of ways people dump pollutants into ditches or catch basins.

On-site management of stormwater to reduce the quantity of stormwater and pollution entering the drainage system.

Similar to illicit discharges, events that cause flooding, system surcharges, or on-going pollutant loadings are possible both up- and down-stream from the city limits, and originate from a variety of causes. These include inadequacies in the type and design of infrastructure; inadequate maintenance; insufficient erosion and/or sediment control practices; and increases in impervious area without provision for on-site infiltration of stormwater into the ground. The City regulates these issues through implementation of the City ordinances within the city limits.

Reduction and prevention of pollution at City facilities and resulting from City activities and business practices.

The City provides services with a potential for creating water pollution, erosion, and sedimentation. These include field activities such as ditch cleaning and excavation/maintenance activities, as well as activities at City facilities, such as vehicle washing and maintenance and material handling such as street sweeper dumping and processing. The Federal NPDES Stormwater Program requires the City to implement pollution prevention practices that reduce or eliminate stormwater pollution from City activities. Beyond this regulatory motivation, it is important that the City lead by example in areas where similar practices and behaviors from citizens and businesses are required.

Public education geared toward broad community stewardship of water resources.

The Federal NPDES Stormwater Program places significant emphasis on public education as part of the long-term solution to stormwater pollution. As such, education is a required element of the Stormwater Plan. The long-term success of the City's efforts will hinge on increased awareness and stewardship throughout the community. The Stormwater Plan will result in formal, organized educational and outreach efforts that are targeted broadly throughout the metropolitan area. Many of these efforts are most effectively approached on a Northwest Arkansas Stormwater Compliance Group basis - a cooperative effort between the 15 MS4s located in the Benton and Washington County area and the University of Arkansas' Cooperative Extension Service.

Public awareness and involvement in the City's Stormwater management program.

Broad awareness and participation in the development and implementation of the Stormwater Plan by residents and local area businesses is a key component to ensure effectiveness of the Stormwater Plan. The Stormwater Plan includes a public involvement component in its development that meets the Federal NPDES program

Targeted infrastructure improvements and maintenance programs to improve water quality and restore high priority areas.

The Stormwater Plan will serve as a basis for assessing future drainage infrastructure needs, culminating in a prioritized list of capital improvements that helps meet the City's water quality objectives.

ADEQ Required Municipal Separate Storm Sewer System (MS4) Plan elements.

The NPDES Stormwater Program requires that the City submit a MS4 plan in order to acquire a MS4 permit to legally discharge stormwater to the waters of the United States.

The Federal rules and, therefore, ADEQ's permit requirements, direct that the City's MS4 plan address six minimum areas, which are termed "Minimum Control Measures." These areas are broadly titled in the rules as follows:

- 1. Public Education and Outreach on Stormwater Impacts;
- 2. Public Involvement and Participation;
- 3. Illicit Discharges Detection and Elimination;
- 4. Construction Site Stormwater Runoff Control;
- 5. Post-Construction Stormwater Management for New Development & Re-Development; and
- 6. Pollution Prevention in Municipal Operations.

Under each of these areas described above, the City's MS4 plan must contain the following information:

- 1. The structural and non-structural Best Management Practices (BMPs) that the permittee or another entity will implement for each of the stormwater Minimum Control Measures;
- 2. The measurable goals and benchmarks for each of the BMPs including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action; and
- 3. The person or persons responsible for implementing or coordinating the BMPs for the permittee's MS4 plan.

In addition to the requirements listed above, the permittee must provide a rationale for how and why each of the BMPs is selected and measurable goals for the permittee's stormwater management program.

Stormwater Best Management Practices (BMPs) is a catch-all term or phrase for the various actions and thoughts for managing stormwater to reduce the negative impacts of runoff on the receiving streams. While the term has become widely used by the regulatory agencies and throughout the stormwater management industry, it does NOT imply that each BMP is necessarily the "Best" at achieving a particular stormwater management objective. BMPs are alternatives to practices that reduce the water quality and flow management functions and benefits of the open drainage system such as piping, filling or hardening open drainage ways. BMPs include, but are not limited to:

- 1. Structural, non-structural, and nature-mimicking devices that reduce or eliminate runoff, or the pollutants that it can carry;
- 2. Creation and protection of natural features such as wetlands or ponds that improve water quality and/or attenuate flow;
- 3. Maintenance or construction practices that prevent erosion, control sedimentation, and reduce pollution entering runoff;
- 4. Regulations, educational strategies, and enforcement programs that inform the public, developers, business/industry, etc. on stormwater pollution, prevention, and protection of water quality; and
- 5. Protection and maintenance of:
 - a. Open drainage ways for stormwater treatment and conveyance;
 - Adjacent riparian buffers to provide natural stormwater filtration and cooling;
 - c. Long-term channel stability and other stormwater management functions; and
 - d. Avoidance of piping, filling, or deteriorating the condition of open drainage ways.

Overview of Bella Vista's Stormwater Drainage Systems

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. The City performs all operation and maintenance on the public drainage system

that is designed and constructed to City standards and located within public easements or rights-of-way, or on real property that has been conveyed or dedicated to the City, as well as public outfalls to natural streams within the City's jurisdiction. The geographic area covered by this Plan includes roughly 46 square miles inside the Bella Vista's municipal limits.

The City's stormwater drainage system also includes limited private (commercial, industrial & residential) stormwater management facilities, including seven private dam structures, that help moderate and reduce the volume and pollutant content of stormwater leaving private property and entering the public stormwater drainage system and/or local streams.

Stormwater Drainage Basin Characteristics

Bella Vista is entirely contained within the Elk River (Little Sugar Creek) Watershed. Surface water runoff travels northward through Bella Vista into Missouri via tributaries of Little Sugar Creek to the Elk River and Missouri, which eventually drains back to the west and southwest to the Arkansas River Watershed via the Neosho River in Oklahoma.

A drainage basin can be described as a geographic area within which stormwater drain from many small systems converging on a larger drainage way culminating into outfalls. Within Bella Vista, three outfall locations have been identified:

- Within the Tanyard Creek-Little Sugar Creek subbasin of the Elk River Watershed, stormwater flows northward via Little Sugar Creek where it leaves Bella Vista at the intersection of Little Sugar Creek and the Arkansas-Missouri boundary.
- 2. Within the Browning Creek (Gordon Hollow Creek)-Little Sugar Creek subbasin of the Elk River Watershed, stormwater flows northward through unincorporated Benton County and thence into Missouri via Browning Creek (Gordon Hollow Creek) where it leaves the Bella Vista in the vicinity of Gordon Hollow Drive. The unincorporated portion of Benton County is currently subject to annexation into the City pending the outcome of a lawsuit challenging the lawsuit. If this land is incorporated into the City, this outfall could ultimately be located at the intersection of Browning Creek (Gordon Hollow Creek) and the Arkansas-Missouri boundary.
- 3. Within the Mill Creek subbasin of the Elk River Watershed, stormwater flows northwesterly via Mill Creek through unincorporated Benton County into Missouri. The outfall point is located at the intersection of the western municipal boundary and Mill Creek.

The character and condition of the drainage ways varies significantly throughout the basins, depending on surrounding land uses and contributing drainages.

Section II: Goals, Policies, and Implementation Actions

This section provides overall guidance to the City in performing stormwater management activities in a manner consistent with State and Federal laws, while meeting local goals and the long-term outcomes the City hopes to achieve. The following goals are derived from long-term key outcomes that have been reviewed. The policies provide specific direction, consistent with the local goals, State and Federal requirements. Implementation actions include BMPs discussed in detail in the MS4 plan and other actions needed to achieve local objectives. The work plan for completion of Implementation actions is in the Stormwater Plan Implementation Action Summary.

Goal 1: Protect Citizens and Property from Flooding

Policies

- 1.1 Maintain surface drainage in the City to reduce the threat of flooding, through proper maintenance of the City's stormwater drainage system and other infrastructure, with practices that are protective of water quality.
- 1.2 Through the development review process, ensure that new development incorporates adequate stormwater management and infrastructure to avoid up- and down-stream capacity and water quality problems.
- 1.3 Create and preserve open stormwater drainage networks, where feasible, to best accommodate peak storm flows while providing and maintaining flood storage capacity as well as promoting and improving water quality.
- 1.4 Adhere to standards, policies, and practices which comply with Federal Emergency Management Agency (FEMA) Flood Management Program requirements to insure that the City maintains flood insurance coverage under this program.

- 1.A. Continue evaluation of City maintenance practices. Implement appropriate BMPs to assure that the City adequately maintains the stormwater drainage system capacity in an environmentally responsible manner.
- 1.B .Evaluate and refine the City's drainage program, including education, outreach, inspection, and enforcement components to reduce the negative stormwater impacts from land alteration, erosion, sedimentation, and excessive runoff.
- 1.C. Continue to review the City's Drainage Manual. Assess the public stormwater drainage system and capacity needs. Identify capital improvements and other measures necessary to maintain and provide adequate system capacity for planned community growth.
- 1.D. Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and

Outreach on Stormwater Impacts, to ensure that residents, businesses, and industries within our jurisdiction are aware of the importance of preventing pollution from entering the streams and water bodies of the State.

- 1.E. Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to minimize or eliminate erosion and sedimentation in the stormwater drainage system due to new construction.
- 1.F. Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, to ensure that new development is in compliance with Local, State and Federal flow-regulating and water quality management practices, such as detention ponds, on-site stormwater storage, etc.
- 1.G. BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure adequate creation, maintenance, and inspection of the stormwater system.

Goal 2: Improve Surface and Sub-surface Waters for Aquatic Life and Other Beneficial Uses

Policies

- 2.1 The City will monitor and implement practices and regulatory programs with the objective of improving surface and groundwater quality to, at a minimum, meet State water quality standards, adequately protect threatened and endangered wildlife, and meet the State beneficial use guidelines.
- 2.2 The City will maintain its open channels and waterways in a manner that is protective of their natural hydrologic and stormwater management and other habitation functions for the benefit of the citizens of the City, local wildlife (including threatened or endangered species), and for future generations of both.

- 2.A. Promote pollution protection educational efforts, including signage, development project review, and public outreach.
- 2.B. Enhance erosion and illicit discharge detection and compliance efforts, including permitting and Code enforcement.
- 2.C. Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to enhance citizens' and businesses' knowledge regarding water quality regulations as well as the benefits to the community from properly functioning waterways.
- 2.D. Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to eliminate or minimize toxic discharges from business and industry.

- 2.E. Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to minimize sedimentation and channel degradation from construction sites.
- 2.F. Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Re-Development, to ensure long-term functioning of newly- and re-developed sites.
- 2.G. Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure that municipal properties including the stormwater drainage system are maintained in properly-functioning and environmentally-friendly conditions.

Goal 3: Preserve and Maintain Surface Waters, Wetlands, and Riparian Areas

Policies

- 3.1 Through the development plan review process, the City will ensure that development is protective of significant open waterways, wetlands, and riparian areas that meet historical, existing, and future needs.
- 3.2 The City will implement permitting programs, educational outreach, compliance inspections and enforcement activities as needed to reduce erosion, sedimentation, illicit discharges, and other pollution impacts to the City's waterways.

- 3.A. The City will review and refine its drainage program, which addresses erosion, sedimentation, and the impacts of land alteration, including permitting, inspections, technical education, public outreach, and enforcement.
- 3.B. The City will review development proposals for impacts on open drainage ways, wetlands, and riparian areas, and protect the functions and benefits of these areas as provided for in the Municipal Code; Design Standards; and other regulations, guidelines, and requirements
- 3.C. The City will work cooperatively with citizens, businesses, and agencies to protect and improve surface waterways, seek opportunities for stewardship partnerships, further enhance educational opportunities, and continue participation in intergovernmental work groups.
- 3.D. The City will implement and continue to refine/improve BMPs for all City activities with potential to impact water quality and/or the functions of waterways, wetlands, and riparian areas.
- 3.E. Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to reduce or eliminate sedimentation from construction sites as one of several contributors to poor water quality and quantity management.

- 3.F. Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, so developments maintain the function and capacity of the stormwater drainage system, as well as preventing the contribution to future degradation of either.
- 3.G. Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, which is critical to maintaining properly functioning wetlands, riparian areas, open channels, and the overall system.

Goal 4: Citizens, Businesses, and Industries Understand the Need to Protect Water Quality

Policies

- 4.1 The City will develop targeted education and outreach and technical assistance programs regarding practices and obligations for keeping debris and pollutants out of the stormwater drainage system and train stakeholder groups in appropriate erosion control and sediment prevention practices, as well as stormwater management BMPs.
- 4.2 The City will seek to form partnerships with neighborhoods and other community groups interested in providing stewardship of local waterways.
- 4.3 The City will develop, implement, and enforce appropriate development design, and Municipal Codes to address water quality compliance issues, including pollution, habitat, and aesthetic issues, to encourage the development of urban waterways that are positive amenities in the community.

- 4.A. The City will continue to support outreach and education efforts regarding water quality, riparian and wetland areas, including business, contractor, resident, and developer outreach programs to educate these parties about their impacts on stormwater quality.
- 4.B. Continue maintenance, enforcement, and compliance activities including inspections, technical assistance, and Code enforcement.
- 4.C. Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to engage the public in the efforts to create positive urban amenities.
- 4.D. Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to ensure that waterways are safe; meet Local, State, and Federal water quality standards; and can function as amenities to the whole region.

Goal 5: Urban Drainage Ways Become Community Amenities

Policies

- 5.1 The City will conduct education and outreach activities to appropriate target groups to increase understanding of the importance of maintaining safe and clean drainage ways, and to seek volunteers willing to be caretakers for water features near them.
- 5.2 The City will (through the Municipal Code of Ordinances and Bella Vista Drainage Manual) protect existing significant open waterways and encourage through site planning and landscaping the creation of additional areas that enhances the attractiveness and natural functions of the water features.
- 5.3 The City will maintain all drainage ways in a manner that provides for safe and attractive conditions within the limits of its fiscal constraints.

- 5.A. Enhance the City's erosion control program, including educating developers and the community regarding the positive aspects of open waterways to promote acceptance, and integrating effective compliance and enforcement components.
- 5.B. Provide adequate funding within the City's restraints for public maintenance of the stormwater drainage system, and ensure ongoing maintenance of private stormwater features through development agreements.
- 5.C. Increase educational outreach to schools and other youth groups to increase awareness of children regarding the need to keep litter and pollutants out of urban drainage ways.
- 5.D. Implement all six of the NPDES Minimum Control Measure BMPs. Implementing all of the provisions of the MS4 plan will ultimately result in improved water quality and quantity management, improved habitat and resource protection, and, ultimately, enhance urban waterways as desirable community amenities.

Section III: Municipal NPDES MS4 Plan

Stormwater Management Program - Responsible Parties

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. In response to the NPDES Phase II stormwater requirements, the City has developed a MS4 plan addressing each of the six required Minimum Control Measures, as specified in the Federal-NPDES Phase II rules. The City's stormwater management program is the responsibility of the Planning, Building, and Code Enforcement Department. Other departments within the City of Bella Vista will receive training to recognize stormwater issues related to their facility, the fieldwork they do, and for reporting these and other activities around the municipality to the Planning, Building, and Code Enforcement Department for review, investigation, education, enforcement, and/or legal action. Public Education and Involvement would also be encouraged with their co-workers, families, and neighbors. This same training will be made available to the employees of the Bella Vista Property Owners Association.

City of Bella Vista Organizational Chart

The current organizational chart for the City of Bella Vista can be found in Appendix A.

NPDES Phase II BMP Requirements

Specific BMPs are proposed for each Minimum Control Measure (MCM), which are intended to support the reduction of discharges of pollutants in stormwater runoff to the maximum extent practicable (MEP) as required by the Federal-NPDES Phase II rules. Each MCM section provides the following information:

- A list of planned BMPs (proposed MS4 plan activities);
- A brief explanation of the BMP;
- A list of the responsible parties for the implementation;
- A summary of measurable goals for the planned BMPs; and
- A development/implementation schedule summary listing each BMP's activity, topic emphasis and target audience for each year; and the rationale for each topic chosen.

The BMP schedule shows when certain activities will be completed on a calendar year basis. More specific dates are not given since weather (drought, flood, and/or "normal") conditions as well as the availability of funds from future city budgets may affect the timeline for the various actions. Early or late completion of one activity may also affect the schedule for starting or finishing the next one.

The NPDES Phase II rules provide for a five-year implementation schedule starting from March of

2004. Bella Vista was not determined to be part of an Urbanized Area until after the 2010 Census, so was not required to submit MS4 paperwork (NOI, this original SWMP, etc.) until January 2013 (per ADEQ notification). The current Arkansas State NPDES Permit implementation schedule cover calendar years 2009 through 2013 - or until the next permit is adopted. It is expected by City staff that the first 5-year cycle for the City's permit will overlap into the next state permit cycle.

Minimum Control Measure #1: Public Education and Outreach

Permit Requirements

Regulation 40 CFR 122.34(b)(1): "The permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff."

Applicable City BMPs

Public Education and Outreach (PEO):

- **PEO1** Develop and distribute printed educational materials.
- PEO2 Develop and distribute electronic educational materials.
- **PEO3** Create displays and staff educational booths.
- **PEO4** Conduct hand-on youth stormwater/water quality education programs.
- **PEO5** Conduct stormwater programs for adult audiences.
- **PEO6** Riparian area plantings

BMP Explanation

- PEO1: <u>Develop and distribute printed educational materials.</u> Input from both the MS4 Stormwater Compliance Group and Education Steering Committee guides the emphases of electronic and printed educational materials. Once topics have been identified, fact sheets, newsletters, press releases, and Public Service Announcements (PSAs) will be developed, adapted, and/or gathered for distribution at public meetings, in support of presentations, and with educational displays. Stormwater management and pollution prevention messages will be provided to participating MS4s for inclusion in municipal utility bill mailings to their residents. This BMP also can be partnered with BMP IDDE2; O&M2; O&M3; and O&M5.
- PEO2: <u>Develop and distribute electronic educational materials</u>. Input from both the MS4
 Stormwater Compliance Group and Education Steering Committee guides the emphases of electronic and printed educational materials. Once topics have been identified, podcasts, elearning modules, website content, e-newsletters, e-press releases, and digital Public Service Announcements (PSAs) will be developed, adapted, and/or gathered for distribution at

public meetings, in support of presentations, and with educational displays. Stormwater management and pollution prevention messages will be provided to participating MS4s for inclusion in municipal utility bill mailings to their residents. This BMP also can be partnered with BMP; O&M2; O&M3; and O&M5.

- PEO3: <u>Create displays and staff educational booths.</u> Displays highlighting the annual topics of emphasis will be created and set up/staffed at libraries, banks, schools, local festivals, county fairs, etc. This BMP also can be partnered with BMP PIP1; IDDE2.
- PEO4: <u>Conduct hand-on youth stormwater/water quality education programs</u>. Educational programs for school youth will focus on the water cycle, watersheds, stormwater dynamics, water quality and pollution prevention using the Enviro-Scape surface runoff model, groundwater simulator, hands-on exercises from Project WET, Project WILD, and Project Learning Tree and creek-side classrooms. Programs conducted will support the Arkansas State Frameworks required curriculum. This BMP also can be partnered with BMP; PIP2; IDDE2; IDDE7; PDS5; PDS7; PDS9; and O&M6.
- PEO5: <u>Conduct stormwater programs for adult audiences.</u> Educational presentations will be given to illustrate stormwater dynamics, identify potential pollutants and pathways, describe techniques to reduce stormwater pollution and encourage voluntary BMP implementation according to the annual topic/audience emphases outlined in the SWMP. This BMP also can be partnered with BMP PIP1; PIP2; IDDE1; IDDE2; IDDE6; IDDE7; CRC1; CRC5; PDS1; PDS5; PDS6; PDS7; PDS8; PDS9; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6.
- PEO6: <u>Riparian area plantings</u>. A series of opportunities will be coordinated with the various watershed partnerships in NWA to provide residents, contractors, volunteers, service groups, families, school and scouting groups, and other organizations the chance to plant, clean-up, maintain, improve or otherwise repair riparian areas inside the City of Bella Vista. This BMP also can be partnered with BMP PIP1; PIP2; PDS7; PDS8; PDS9; O&M5; and O&M6.

Rationale

In order to cover a wide range of audiences including government staff, the general public, and youth, multiple outreach genres and methods must be used (booths and materials at local festivals, newspaper articles, school programs, etc.) The contract with Regional Planning and the University of Arkansas Cooperative Extension Service allows for more educational activities to be pursued while providing a unified message for the residents of Northwest Arkansas. There is also a great need to partner with various organizations to maximize the educational impact. Coordinating with other agencies like the Cities of Fayetteville, Springdale, Bentonville, Washington and Benton Counties, the Illinois River Watershed Partnership and others, helps to keep government staff informed and educated on regional stormwater-related issues, such as existing materials and information available for common use (e.g., monitoring data and results of BMP evaluations), and issues such as Endangered Species Act (ESA) implications for the City's stormwater management activities. The

Cooperative Extension Service also partners with these organizations and uses media outlets and Extension Service listings to promote volunteer opportunities for stream clean ups and water monitoring. Bella Vista's strategy for developing and distributing the public education materials is to start with information such as the most typical sources of pollutants in stormwater runoff and the impacts associated with those pollutants, and making this information available as educational handouts, flyers, and mailings handled by the University of Arkansas' Cooperative Extension Service. Future activities will include outreach presentations, advertisements, and workshops for the public, businesses, industry, and various other stakeholders, to educate them on impacts that the City's stormwater management program may have, and what they can do to improve stormwater quality. Outreach presentations, advertisements, and workshops can target development businesses to utilize new technology methods for stormwater runoff control and encourage Low Impact Development (LID) within development planning. Numerous topics can be covered by these outreach methods and will include recommendations for topics of interest via steering committees. Topic areas are coordinated to target populations that are defined by the different committees. These multiple partners, venues, and materials allow for at least 50% of the population of the MS4 areas to be reached.

Responsible Parties

The Northwest Arkansas Regional Planning and the University of Arkansas' Cooperative Extension Service have contracted with the municipality to be responsible for the development and implementation of the public education efforts. The City of Bella Vista shall oversee these efforts and will address any and all short-falls of the contract product to ensure that all permit requirements are met. The City's various departments will coordinate with various community and watershed groups for other educational and outreach activities beyond the scope of the Cooperative Extension Service's educational contract.

Summary of Measurable Goals

University of Arkansas Cooperative Extension Service staff may use periodic neighborhood surveys, public events, and consultation with community and citizen group leaders to solicit feedback on specific education and outreach efforts. The goals listed below were selected by the Cooperative Extension Service's staff that is under contract for our educational portions of our permit, but the MS4 representatives approved the quantity for each goal. Goal quantities were based on the percent of the Urbanized Area within the municipality so larger cities will have more stringent requirements (both in size and quantity) than a neighboring and/or adjoining small town may have. Specific measureable goals for Bella Vista during the 5-year permit period include, but are not limited to:

- 20 electronic and printed educational materials will be developed;
- Documenting the number of educational materials distributed;
- Stormwater displays with different focal points will be created for use at 5 different events/locales;

- 20 stormwater education programs will be conducted for youth audiences;
- 10 stormwater education programs will be conducted for adult audiences; and
- 2 riparian plantings in each of the watersheds that Bella Vista is a major contributor to.

Development/Implementation Schedule Summary

BMD#	PERMIT YEAR					
BMP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	evaluate program in Continue meeting w educational efforts a	ith the stormwater co	mpliance group on eeds. (O&M2 and (a monthly basis to r D&M3)	eceive feedback on	
	Topic Emphasis: Sediment & Erosion Control, LID, and Green Infrastructure	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Storm drain dumping and waste disposals Target Audience: Minority residents; All materials will be made available in Minority and available in both English and	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes		
PEO1	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff	Target Audience: Home owners; All materials will be made available in both English and non-English languages.	Audience: Minority residents; All materials will be	Residents and pet owners; All materials will be	Target Audience: Approximate 1600-known Industrial, Institutional, and Commercial users of the Bella Vista Village POA Water Department (private municipal water and sewer provider)	
	Rationale: Printed materials - particularly from training sessions - can be copied and shared with other personnel for educating co-workers.	Rationale: Printed materials that can be referenced many times to remind why stormwater management is important to them.	Rationale: 2010 census date will reveal minority residents are an under-served audience needing stormwater information.	Rationale: Printed materials can provide other references on how pet waste affects water quality.	Rationale: Printed materials provide announcements and reminders of how proper disposal of hazardous wastes can be achieved.	
PEO2		 nic outreach methods ormwater managemei			- '	

BMP#			PERMIT YEAR				
	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18		
	Topic Emphasis: Sediment & Erosion Control, LID, and Green Infrastructure	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Storm drain dumping and waste disposals	Topic Emphasis: Pet waste pick-up	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes		
	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff	Target Audience: Home owners; All materials will be made available in both English and non-English languages.	Target Audience: Minority residents; All materials will be made available in both English and non-English languages.	Target Audience: Residents and pet owners; All materials will be made available in both English and non-English languages.	Target Audience: Approximate 1600-known Industrial, Institutional, and Commercial users of the Bella Vista Village POA Water Department (private municipal water and sewer provider)		
	Rationale: Electronic information can be easily shared with other personnel for educating co- workers when printed copies are not available.	Rationale: Electronic formats can be easily repeated to remind people how stormwater management is important to them.	Rationale: 2010 census date will reveal minority residents are an under-served audience needing stormwater information.	Rationale: Electronic formats can initiate discussions of how pet waste can affect lives and water quality.	Rationale: Electronic announcements and reminders of disposal of hazardous waste collections can be easily repeated.		
	Use multiple methods of display to educate the general public highlighting season-specific and media- driven stormwater management and pollution prevention topics. (PEO3, PIP1, and IDDE2)						
	Topic Emphasis: Sediment & Erosion Control, LID, and Green Infrastructure	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Storm drain dumping and cooking oil disposal	Topic Emphasis: Pet waste pick-up	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes		
PEO3	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff	Target Audience: Home owners; All materials will be made available in both English and non-English languages.	Target Audience: Minority residents; All materials will be made available in both English and non-English languages.	Target Audience: Residents and pet owners; All materials will be made available in both English and non-English languages.	Target Audience: Approximate 1600- known Industrial, Institutional, and Commercial users of the Bella Vista Village POA Water Department (private municipal water and sewer provider)		

BMP#			PERMIT YEAR		
BMP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18
	Rationale: Information from displays and booths can provide education on products and services available to construction community.	Rationale: Displays serve as visual reminders to people about how stormwater management is important to them.	Rationale: 2010 census date will reveal minority residents are an under-served audience needing stormwater information.	Rationale: Displays with printed materials can provide other references on how pet waste affects water quality.	Rationale: Booths and other displays about disposal of hazardous waste collections can give locations where proper disposal can be achieved.
		ctivities with youth the	-		amp programs.
	Topic Emphasis: Sediment & Erosion Control, LID, and Green Infrastructure	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Storm drain dumping and waste disposals	Topic Emphasis: Pet waste pick-up	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes
PEO4	Target Audience: Youth living or learning near construction projects; All materials will be made available in both English and non-English languages	Target Audience: Home owners and their family members; All materials will be made available in both English and non-English languages	Target Audience: Minority residents and their family members; All materials will be made available in both English and non-English languages	Target Audience: Residents and pet owners; All materials will be made available in both English and non-English languages	Target Audience: Young family members of business owners and households; All materials will be made available in both English and non- English languages
	Rationale: Provide erosion control training to youth to show how construction can affect stormwater quality and quantity.	Rationale: Provide demonstrations to youth for them to understand how stormwater can be a resource instead of a liability.	Rationale: 2010 census date will reveal minority residents are an under-served audience needing stormwater information.	Rationale: Recent newsletters, displays and presentations reveal an ignorance of the impact of pet waste on urban stormwater.	Rationale: Misuse and improper disposal of wastes are sources of stormwater pollution.
PEO5	events. (PEO5, PIP1,	l ctivities with adults th PIP2, IDDE1, IDDE2, II 2, O&M3, O&M4, O&N	DDE6, IDDE7, CRC1		

BMP#			PERMIT YEAR			
BMP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	Topic Emphasis: Sediment & Erosion Control, LID, and Green Infrastructure	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Storm drain dumping and cooking oil disposal	Topic Emphasis: Pet waste pick-up	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes	
	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff	Target Audience: Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners	Target Audience: Minority residents and business owners; All materials will be made available in both English and non- English languages	Target Audience: Residents and pet owners; All materials will be made available in both English and non-English languages	Target Audience: Approximate 1600- known Industrial, Institutional, and Commercial users of the Bella Vista Village POA Water Department (private municipal water and sewer provider)	
	Rationale: Conducting multi- state erosion control conference and EPA Green infrastructure Workshop in NWA provides national training opportunities to local construction community and stormwater personnel.	Rationale: Green Industry needs to understand and work with stormwater as a resource (rain barrels, cisterns, rain gardens and using native plants), instead of a liability.	Rationale: 2010 census date will reveal minority residents are an under-served audience needing stormwater information.	Rationale: Recent newsletters, displays and presentations have revealed an ignorance of the volume and impact of pet waste pollutants on urban stormwater quality.	Rationale: Misuse and improper disposal of wastes are sources of stormwater pollution.	
	Trees, shrubs, grasses, and other riparian area plantings stabilize banks and bottoms while reducing opportunities for erosion to occur. (PEO6, PIP1, PIP2, PDS7, PDS8, PDS9, O&M5, and O&M6)					
PEO6	Topic Emphasis: Trees and shrubs planted along creeks and streams prevent and reduce erosion.	Topic Emphasis: Recognize and appreciate local waterways so you can help protect them.	Topic Emphasis: Many minority residents have already transplanted foods and other plants from their home cultures to our local waterways.	Topic Emphasis: Pet waste pick-up	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes	

BMP#	PERMIT YEAR					
	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff	Target Audience: Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners	Target Audience: Minority residents and business owners; All materials will be made available in both English and non- English languages	Target Audience: Residents and pet owners; All materials will be made available in both English and non-English languages	Target Audience: Approximate 1600- known Industrial, Institutional, and Commercial users of the Bella Vista Village POA Water Department (private municipal water and sewer provider)	
	Rationale: Increased riparian protection can mean fewer construction or post-construction BMPS needed - resulting in fewer dollars spent.	Rationale: Maintained waterways adjoining properties can mean reduced need for irrigation, fertilizing, and flooding.	Rationale: Maintaining healthy riparian areas can support other wildlife and food sources.	Rationale: Keeping pet waste out of creeks and streams removes nutrients and potentially bacteria from downstream water supplies for animals and humans.	Rationale: Misuse and improper disposal of wastes are sources of stormwater pollution.	

Minimum Control Measure #2: Public Involvement and Participation

Permit Requirements:

"The permittee must, at a minimum, comply with State and local public notice requirements when implementing a public involvement/participation program." Measurable program accomplishments will be tracked and reported through quarterly and annual reports presented to the NWA Regional Planning Commission, education steering committees, and the MS4 stormwater compliance group along with annual reports for each participating MS4 prior to the ADEQ annual reporting deadline.

Applicable City BMPs

Public Involvement and Participation (PIP):

- PIP1 Train and Utilize Volunteer Educators
- PIP2 Conduct Public Participation/Involvement Events
- PIP3 Engage Residents in Stormwater Policy Development

BMP Explanation

- PIP1: <u>Train and Utilize Volunteer Educators</u>: "Train-the-trainer" processes will be used to engage public volunteers and educators in teaching stormwater and pollution prevention (e.g. Benton and Washington County Master Gardeners, Master Naturalists, Lake-Smart Leaders, etc.) This BMP also can be partnered with BMP PEO3; PEO4; PEO5; PEO6; IDDE3; CRC5; and CRC7.
- PIP2: <u>Conduct Public Participation/Involvement Events</u>: Citizen and youth groups will participate in public involvement events (litter pick up, establishing demonstration rain gardens, planting riparian vegetation, stenciling storm drain inlets, etc.). This BMP also can be partnered with BMP PEO4; PEO5; PEO6; CRC5; PDS5; PDS7; PDS8; PDS9; and O&M6. All materials will be made available in both English and non-English languages.
- PIP3: <u>Engage Residents in Stormwater Policy Development</u>: Information will be included through multiple outlets (website, newsletters, press releases, etc.) to encourage public input/involvement as MS4 stormwater management policy evolves. This BMP also can be partnered with BMP IDDE1; IDDE3; CRC1; CRC2; CRC3; CRC5; CRC7; PDS1; PDS7; PDS8; PDS9; and O&M6. All materials will be made available in both English and non-English languages.

Rationale

The jurisdiction selected the above BMPs to address this Minimum Control Measure #2 and to complement its public education efforts in Minimum Control Measure #1. The jurisdiction has a Stormwater Ordinance, which provides initial review and approval of the public involvement plan included in the MS4 permit application. That plan outlined opportunities for public input into the

Stormwater Plan, held at various stages of the Stormwater Plan development. These events included informational posters and graphic displays, with staff available to answer questions and solicit feedback. Outreach was directed at the general public as well as applicable professional and environmental organizations and the development community. Certain policies, implementation actions, and BMPs included in the Stormwater Plan may trigger requirements for additional public involvement, such as amending the Municipal Code, the Development Code, or implementing new ordinances.

The City is working through the Northwest Arkansas Regional Planning Commission to contract with the University of Arkansas' Cooperative Extension Service to continue a public involvement and participation program addressing this and 14 other jurisdictions within our MS4. Components of this program will include organizing citizen participation in periodic creek cleanup efforts, storm drain stenciling, or assisting with educational or interpretive events.

Responsible Parties

The jurisdiction is responsible for the development and implementation of the public involvement and participation efforts, utilizing the services of the University of Arkansas Cooperative Extension Service (contracted through the Northwest Arkansas Regional Planning Commission). The City of Bella Vista shall oversee these efforts and will address any and all short-falls of the contract product to ensure that all permit requirements are met.

Summary of Measurable Goals

The jurisdiction will provide opportunities for public input on the stormwater management program on an annual basis in various forms, including surveys and/or public events. Additionally, the administration will be periodically updated on the stormwater management program and efforts to meet State water quality standards. Feedback from the administration on annual progress will guide modifications to the stormwater management program as appropriate. The jurisdiction will track these activities on an annual basis. In addition, the University of Arkansas' Cooperative Extension Service will utilize Master Gardeners and community volunteers for creek clean-ups, storm drain stenciling, and assisting with PIP1 and PP2 programs. The goals listed below were selected by the Cooperative Extension Service's staff that is under contract for our educational portions of our permit, but the MS4 representatives approved the quantity for each goal. Goal quantities were based on the percent of the Urbanized Area within the municipality so larger cities will have more stringent requirements (both in size and quantity) than a neighboring and/or adjoining small town may have. Specific measureable goals during the 5-year permit period include, but are not limited to:

- 5 train-the-trainer programs will be conducted;
- 3 public participation events will be coordinated; and
- 5 stormwater policy development, review, or implementation public meetings will be held.

Summary of Development/Implementation Schedule

BMP#	PERMIT YEAR					
BIMP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	Incorporate stormwater pollution prevention into annual Master Gardener training and use trained volunteers for further public outreach, education, and involvement programs. (PEO3, PEO4, PEO5, PEO6, PIP1, IDDE3, CRC5, and CRC7)					
	Topic Emphasis: Use volunteers to plant native tree seedlings to enhance urban riparian buffers	Topic Emphasis: Master Gardeners to conduct rain barrel workshops and low-input landscaping programs	Topic Emphasis: Coordinate citizen volunteers for storm drain stenciling	Topic Emphasis: Partner with the identified citizen groups to conduct citizen-based water quality monitoring	Topic Emphasis: Partner with the identified citizen groups to conduct stream clean-ups	
PIP1	Target Audience: Urban creek-side landowners and their family members	Target Audience: Urban homeowners; All materials will be made available in both English and non-English languages	Target Audience: General public and civic organizations; All materials will be made available in both English and non-English languages	Target Audience: Residents, property owner association groups, and students; All materials will be made available in both English and non-English languages	g and use trained 03, PEO4, PEO5, Topic Emphasis: Partner with the identified citizen groups to conduct stream clean-ups Target Audience: Known Industrial, Institutional, and Commercial users of Bella Vista Village Water Department (private municipal water and sewer provider) and youth organizations Rationale: Improper containment and disposal of trash continues to be a source of stormwater pollution	
	Rationale: Support green infrastructure educational emphasis promoting urban greenways for stormwater management	Rationale: Master Gardeners are committed to sharing their expertise	Rationale: Storm drain stenciling supports the "storm drain dumping" educational priority for 2012	Rationale: Connects construction runoff, over-fertilization, and pet waste with stormwater turbidity, nutrients and bacteria	Improper containment and disposal of trash continues to be a source of stormwater	
	Citizens and youth groups to participate in public participation and public involvement activities. (PEO4, PEO5, PEO6, PIP2, CRC5, PDS5, PDS7, PDS8, PDS9, and O&M6)					
PIP2	Topic Emphasis: How keeping litter out of urban riparian buffers helps improves the health of the waterway	Topic Emphasis: Rain barrel workshops and low-input landscaping programs	Topic Emphasis: Coordinate citizen volunteers for storm drain stenciling	Topic Emphasis: Citizen-based water quality monitoring		
	Target Audience: Public school youth,	Target	Target Audience: General public and	Target Audience: Residents and	Target Audience:	

ВМР#	PERMIT YEAR					
2	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	scouting groups, and camp programs.	Audience: Urban homeowners; All materials will be made available in both English and non-English languages	civic organizations; All materials will be made available in both English and non-English languages	students; All materials will be made available in both English and non-English languages	Known Industrial, Institutional, and Commercial users of Bella Vista Village Water Department (private municipal water and sewer provider) and youth organizations	
	Rationale: Maintained urban greenways are cheaper than most stormwater infrastructure repairs and/or replacement options.	Rationale: Rain barrels and gardens reduce the need for landscape irrigation and lawn watering.	Rationale: Storm drain stenciling supports the "storm drain dumping" educational priority for 2012.	Rationale: Educate how construction runoff, over-fertilization, and pet waste affect stormwater turbidity, nutrients and bacteria.	Rationale: Improper containment and disposal of trash continues to be a source of stormwater pollution.	
	Engage Residents in s CRC7, PDS1, PDS7, PI			DE1, IDDE3, CRC1, CRC	C2, CRC3, CRC5,	
	Topic Emphasis: Urban riparian buffers	Topic Emphasis: Rain barrel workshops and low-input landscaping programs	Topic Emphasis: Storm drain stenciling	Topic Emphasis: Water quality monitoring	Topic Emphasis: Stream clean-ups	
PIP3	Target Audience: Bella Vista' residents and property owners along urban creeks and streams; All materials will be made available in both English and non- English languages	Target Audience: Urban homeowners; All materials will be made available in both English and non-English languages	Target Audience: Property owners and residents along paved streets with storm drains; All materials will be made available in both English and non-English languages	Target Audience: All residents and businesses receiving drinking water from Bella Vista Village Water Department (a private company); All materials will be made available in both English and non-English languages	Target Audience: Bella Vista' residents and property owners along urban creeks and streams; All materials will be made available in both English and non-English languages	

BMP#	PERMIT YEAR					
DIVIP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	Rationale: Maintained urban greenways prevent stormwater damage and flooding.	Rationale: Rain barrels and gardens reduce the need for landscape irrigation and lawn watering.	Rationale: Storm drain stenciling supports the "storm drain dumping" educational priority for 2012.	Rationale: Educate how stormwater turbidity, nutrients and bacteria affect the pre-consumer treatment of drinking water supplies.	Rationale: Improper containment and disposal of wastes continue to be a source of stormwater pollution.	

Minimum Control Measure #3: Illicit Discharge Detection and Elimination

Permit Requirements:

The permittee must:

- Develop, implement and enforce a program to detect and eliminate illicit discharges [as
 defined in 40 CFR §122.26(b)(2)] into the permittee's small MS4, including notifying adjacent
 interconnected MS4 when discharges occur;
- Develop and continue to update a storm sewer system map, showing the location of all
 outfalls and the names and location of all waters that receive discharges from those outfalls,
 including catch basins, pipes, ditches and public and private stormwater facilities;
- Effectively prohibit (through ordinances or other regulatory mechanisms to the maximum extent allowable under Local, State, and Federal laws) non-stormwater discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and actions for non-compliance;
- Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the permittee's system;
- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste to the stormwater system;
- Address all categories of non-storm water discharges or flows (illicit discharges) if identifies as significant contributor of pollutants to the permittee's small MS4;
- Develop a list of occasional incidental non-storm water discharges that will <u>NOT</u> be addressed
 as illicit discharges because of reasonably expectations (based on information available) that
 the source would not be a significant source of pollutants. These will primarily be due to the
 nature of the discharges or conditions the City of Bella Vista' storm water management
 program plan has established for allowing these discharges to the permittee's MS4; and
- Develop a process to respond to and document complaints relating to illicit discharges.

Applicable City BMPs

Illicit Discharge Detection and Elimination (IDDE):

IDDE1 - Ordinance: Reviews and Revisions

IDDE2 - Reporting and Response System for Suspicious Discharges

IDDE3 - Tracking and Enforcement of Illicit Discharges

IDDE4 - Outfall Inventory

IDDE5 - Outfall Mapping

IDDE6 - Citywide Illicit Discharge Detection and Elimination Plan

IDDE7 - Collecting, Identifying, and Assessing Non-Stormwater Discharges

BMP Explanation

- IDDE1: <u>Ordinance: Reviews and Revisions</u>. Annual reviews and revisions to stormwater ordinances are needed to keep the ordinance, its enforcement actions, and any related items up-to-date with the state and federal regulations that are in affect. This BMP also can be partnered with BMP PEO5; PIP3; CRC1; PDS1; O&M1; and O&M2.
- IDDE2: <u>Reporting and Response System for Suspicious Discharges</u>. Suspicious discharges need to be report and responded to in timely manners so that clean-up and enforcement can take place. This BMP can be partnered with BMP PEO1; PEO2; PEO3; PEO4; PEO5; CRC5; PDS5; PDS6; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6.
- IDDE3: <u>Tracking and Enforcement of Illicit Discharges</u>. Prevention of large problems begins with education of owner/operators and prevention of small messes. Unfortunately, sometimes only enforcement can stop the reoccurrence of events. This BMP can be partnered with BMP PIP1; PIP3; CRC5; PDS5; O&M5; and O&M6.
- IDDE4: <u>Outfall Inventory</u>. Continual inventory collection of stormwater outfall makes it easier to track back to locate the source of the discharge when one occurs. This BMP can be partnered with BMP CRC4; CRC6; CRC7; PDS5; PDS7; O&M3; O&M5; and O&M6.
- IDDE5: <u>Outfall Mapping</u>. Mapping stormwater outfalls makes it easier to locate the source of the discharge when one occurs. This BMP can be partnered with BMP PDS5; PDS7; PDS9; and O&M6.
- IDDE6: <u>City-wide Illicit Discharge Detection and Elimination Plan</u>. This plan will include developing and implementing practices at each city-owned or operated site to prevent pollution and/or reduce stormwater discharges that could carry pollution. It also will involve ways to review, examine, repair, replace, improve and/or maintain the existing stormwater system so that

illicit connections to our separate storm sewer system can be removed. This BMP can be partnered with BMP PEO5; CRC4; CRC6; CRC7; PDS5; PDS6; PDS7; PDS8; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. All materials will be made available in both English and non-English languages.

IDDE7: <u>Collecting, Identifying, and Assessing Non-Stormwater Discharges</u>. This process will help the City of Bella Vista identify any discharges that need to be removed from the exempt-status discharge list to a list of identified discharges that may and/or do affect the stormwater system - either the structures or the water quality of the waterway or the downstream receiving water bodies. This BMP can be partnered with BMP PEO4; PEO5; CRC4; CRC6; CRC7; PDS5; PDS6; PDS7; PDS8; O&M2; O&M3; O&M4; O&M5; and O&M6.

Rationale

Bella Vista selected the above seven BMPs to address this requirement. IDDE1 includes an annual review of the existing stormwater ordinance to compare against both other city ordinances as well as the appropriate state regulations. If any deficiencies are found then department and city policies for updating the ordinance shall be followed by the Planning Department's personnel. IDDE2 and IDDE3 describe the City's processes that respond to and document complaints regarding water quality (including illicit discharges) as well as The City's program to prohibit and enforce elimination of illicit discharges. These two BMPs, reporting/response and tracking/enforcement, will work in conjunction and include several methods for reporting presumed illicit spills, sightings and discharges as well as follow-up procedures. Most of the City department's personnel, while doing their daily jobs will report potential illicit problem areas to the Director of Planning & Transportation, or his/her designee. The problem area will be investigated as soon as practically possible and depending on the situation. All infractions will be brought to the owner's attention, followed up on, and an investigation report to the Illicit Complaint files complete with pictures and the investigation results. Larger incidents with water bodies, fish kills with unknown circumstances will also be reported to State Fish and Wildlife and/or the ADEQ for their expertise and water quality measurement capabilities. IDDE2 and IDDE3 also include publicizing of the Planning & Transportation Department's phone number for complaints and protocols for the most efficient and effective follow-up actions in response to calls as well as the phone number for the Police and Fire Departments for emergency and warranted after-hours reporting of obviously environmentallydangerous spills (i.e. almost any petroleum product)

IDDE4 and IDDE5 will work together to continue a project began in the previous permit cycle to update the stormwater inventory and map of the City's Stormwater System. As outfalls continue to be visited during dry periods, the channels will be walked to look for new or previously unmapped outfalls. Outfall maps will be reviewed for completeness; completed where information is missing; updated as new development occurs; and maintained during the permit period. The map was created by using GPS and AutoCAD by a consulting engineering firm. All information is reviewed by City personnel as additional information is provided to compare against older versions of the map or its information. The map will continue to be updated as needed by the Planning Department. New

development designs will be required for all newly platted areas. As-built construction drawings showing streets, inlets and development tie-ins to existing storm drains or outfalls from the development will be required to be submitted on AutoCAD so they can be transferred from the development drawings to the City's digital copy of the storm sewer map.

Activities conducted under IDDE6 will partner with IDDE2 and IDDE 3 to inform the public about the hazards of illicit discharges is implemented through several of the public education outreaches by both the City and their education partner - the University of Arkansas' Cooperative Extension Service. IDDE7 will address the collection, identification, and assessment non-stormwater discharges. Discharges determined to adversely impact the stormwater system will be followed up by appropriate management practices or regulations will be used, developed, and/or implemented including enforcement of any municipal regulations available.

Responsible Parties

- Director of Planning, Building, and Code Enforcement and/or his/her designee
- Bella Vista Water Utilities laboratory, Inflow and Infiltration (I-N-I), and inspection staff members
- Bella Vista Street Dept. personnel, as needed
- Contracted companies and their employees as directed by the Director of Planning, Building, and Code Enforcement

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator. The measurable goals of the illicit discharges program during the 5-year permit period include, but are not limited to:

- Monitor and revise existing ordinances to meet new federal and state permit requirements.
- Develop and implement a system to monitor, document, and track the number and type of calls received each year and the actions taken in response.
- Annually visit a minimum of 20% of the known outfalls for a dry-weather screening. Areas
 visited should overlap with developed and/or mapped areas to search for undocumented
 and previously unknown outfalls. Receiving streams (local and ultimate) of all waters will be
 documented on the field inventory sheets and added to the storm sewer system's digital
 information.
- Document an annual review of outfall maps of the storm sewer system to ensure they are up-to-date. All maps cover the city limits of Bella Vista (not just the Urbanized Area) and

- include the name of each local and regional receiving stream.
- Monitor the number of illicit discharges that are encountered and document enforcement procedures that are conducted.
- Implement and enforce a program to detect and eliminate illicit discharges. The program will include regulatory and enforcement mechanisms and will be evaluated annually.
- Monitor the number of commercial/industrial uses assessed for possible illicit discharges and document resolution of illicit discharges identified.
- Complete an assessment of non-stormwater discharges along with implementing local controls where identified as needed.

Summary of Development/Implementation Schedule

BMP#	PERMIT YEAR						
	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18		
IDDE1	Review and revise stormwater, grading, erosion control, and tree ordinance as needed. (PEO5, PIP3, IDDE1, CRC1, PDS1, O&M1, and O&M2)						
	Topic Emphasis: Review existing ordinance for master Municipal Code revisions.	Topic Emphasis: Review existing ordinance for new (August 2009) MS4 permit requirements.	Topic Emphasis: Draft revisions to existing ordinance due to new (August 2009) MS4 permit requirements.	Topic Emphasis: Monitor and draft any revisions needed due to NWA Construction BMP manual adoption.	Topic Emphasis: Monitor and revise existing ordinance for new EPA MS4 permit (adopted 2012) requirements.		
	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff		
	Rationale: Check for completeness of ordinance due to relocation within Municipal Code.	Rationale: Check for "shortages" between existing ordinance and new permit requirements.	Rationale: Remove "shortages" between existing ordinance and new permit requirements.	Rationale: Remove unpermitted and add new allowed BMPs per newly adopted BMP manual.	Rationale: Prepare for new federally required requirements that will be applicable with next state permit.		
IDDE2	Encourage Bella Vista' residents and businesses to report to City Hall suspected illegal dumping and suspect liquid discharges in and near our drainage ways. (PEO1, PEO2, PEO3, PEO4, PEO5, IDDE2, CRC5, PDS5, PDS6, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)						

ВМР#	PERMIT YEAR					
DIAILH	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	Topic Emphasis: Create and adopt system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges within city limits.	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Monitor and revise as needed the system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges.	Topic Emphasis: Water quality monitoring	Topic Emphasis: Stream clean-ups	
	Target Audience: Urban creek-side landowners and their family members; All materials will be made available in both English and non-English languages	Target Audience: Urban homeowners; All materials will be made available in both English and non- English languages	Target Audience: Property owners and residents along paved streets with storm drains; All materials will be made available in both English and non-English languages	Target Audience: All residents and businesses receiving drinking water from Bella Vista Village POA Water Department (a private company); All materials will be made available in both English and non-English languages	Target Audience: Bella Vista' residents and property owners along urban creeks and streams; All materials will be made available in both English and non-English languages	
	Rationale: Support green infrastructure educational emphasis promoting urban greenways for stormwater management	Rationale: Over- fertilizing and over- watering of landscaping and lawns increases the amounts of polluted waters into our creeks and streams.	Rationale: Storm drain stenciling supports the "storm drain dumping" educational priority for 2012.	Rationale: Educate how stormwater runoff contains trash, nutrients, bacteria, and other pollution which affects the water quality - and our drinking water supply.	Rationale: Improper containment and disposal of wastes continue to be a source of stormwater pollution.	
IDDE3	Tracking illicit discharges and enforcing policies and ordinances. (PIP1, PIP3, IDDE3, CRC5, PDS5, O&M5, and O&M6)					

icipal, Bella Village POA er Department, or contract pany employees nown	Topic Emphasis: Get the library of chemicals and other parameters found in the Bella Vista Village POA Water Department pretreatment samples of past water collections. Target Audience: Municipal and/or contract company employees for known street and roadside ditch dump sites.	Department, and/or c	ators of ordinance (lo r individual). Apply ex unicipal, Bella Vista V ontract company emp	cation; iisting code illage POA Water ployees for known	
the library of ground erials found in various erway from the Vista Village Water entment poles of past er collections. The Audience: icipal, Bella Village POA er Department, or contract pany employees nown enwater outfalls. Tonale: Have all	the library of chemicals and other parameters found in the Bella Vista Village POA Water Department pretreatment samples of past water collections. Target Audience: Municipal and/or contract company employees for known street and roadside	System for repeat violowner/operator; othe enforcement options. Target Audience: M Department, and/or costormwater outfalls ar	ators of ordinance (lo r individual). Apply ex unicipal, Bella Vista V ontract company emp	cation; iisting code illage POA Water ployees for known	
icipal, Bella Village POA er Department, or contract pany employees nown nwater outfalls. onale: Have all	Municipal and/or contract company employees for known street and roadside	Department, and/or costormwater outfalls ar	ontract company emp	oloyees for known	
		Vista Village POA Water Department, and/or contract company employees Water Department, and/or contract company employees Street and roadside Wunicipal and/or Department, and/or contract compans stormwater outfalls and/or known str dump sites.		ny employees for known	
ed for content ella Vista Village Water ertment rement plant ratory onnel. Add ets to relevant ry and do tional reporting scharge if ired by law. e all discharges to source.	Rationale: Have all unknown/unidentified solids collected and tested by proper personnel. If required, report solids location. Remove solids by properly trained personnel.	Rationale: Preventio of owner/operators a Unfortunately, someti reoccurrence of event	nd prevention of smal imes only enforcemer	Il messes.	
M5, and O&M6) ic Emphasis: Co s of "missing" sus	vater outfalls - overlap	areas visited with			
r t s	y and do ional reporting icharge if red by law. e all discharges to source. http://doi.org/10.1006/10	y and do ional reporting icharge if red by law. all discharges to source. Intory stormwater outfalls of unmapped 15, and O&M6) Complete Emphasis: Continue annual inventorying of "missing" suspected outfalls and connection of the complete is of "missing" suspected outfalls and connection of the complete is of "missing" suspected outfalls and connection of the complete is	Remove solids by properly trained personnel. Remove solids by properly trained personnel.	Remove solids by properly trained personnel. Remove solids by properly trained personnel.	

BMP#	PERMIT YEAR						
J 11	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18		
	Target Audience: City employees and contract companies for locating unmapped outfalls. Engineers, designers, contractors, builders and other construction community personnel on newly installed outfalls.						
	Rationale: When a discharge has been reported, knowing the upstream system from the report can make it easier to track back to locate the source of the discharge.						
	Map stormwater outfalls (IDDE5, PDS5, PDS7, PDS9, and O&M6)						
	Topic Emphasis: Continue annual inventorying 20% of known stormwater outfalls - overlap areas visited with areas of "missing" suspected outfalls and connections to stormwater drainage system AND areas of new development and/or redevelopment.						
Topic Emphasis: Monitor and annually revise the outfall inventory for newly built and/or located system expansions or extensions, and/or locations previously outside of city limits of Bella Vista.							
	Target Audience: City employees and contract companies for locating unmapped outfalls. Engineers, designers, contractors, builders and other construction community personnel on newly installed outfalls.						
	Rationale: When a discharge has been reported, knowing the upstream system from the report can make it easier to track back to locate the source of the discharge.						
	Encourage Bella Vista' residents and businesses to report to City Hall suspected illegal dumping and suspect liquid discharges in and near our drainage ways. (PEO5, IDDE6, CRC4, CRC6, CRC7, PDS5, PDS6, PDS7, PDS8, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)						
IDDE6	Review plan for definitions of illegal versus illicit discharges.	Review plan for shortfalls compared to new August 2009 ADEQ MS4 permit. (CRC7, PDS7, PDS8, O&M2, and O&M3)	Develop and implement pollution practices and policies for each city-operated site to prevent pollution and reduce possibility of stormwater discharge carrying pollution. (CRC4, CRC6, CRC7, PDS5, PDS6, PDS7, PDS8, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)		Review plan for shortfalls compared to new federal MS4 permit that will take affect with next state permit. (PDS8 and O&M3)		
	Topic Emphasis: How keeping urban riparian buffers maintain and/or improve the health of its waterway.	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Encourage ownership of drainage ways through storm drain stenciling	Topic Emphasis: Water quality monitoring	Topic Emphasis: Stream clean-ups		

#	PERMIT YEAR						
#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18		
	Target Audience: Urban creek-side landowners, construction personnel, swimming pool owners and operators, and car washes; All materials will be made available in both English and non-English languages	Target Audience: Urban homeowners; All materials will be made available in both English and non- English languages	Target Audience: General public and civic organizations; All materials will be made available in both English and non-English languages	Target Audience: All residents and businesses receiving drinking water from Bella Vista Village POA Water Department (a private company); All materials will be made available in both English and non-English languages	Target Audience: Bella Vista' residents and property owners along urban creeks and streams; All materials will be made available in both English and non-English languages		
	Rationale: Support green infrastructure educational emphasis promoting urban greenways for stormwater management	Rationale: Over- fertilizing and over- watering of landscaping and lawns increases the amounts of polluted waters into our creeks and streams.	Rationale: Storm drain stenciling supports the "storm drain dumping" educational priority for 2012	Rationale: Educate how stormwater runoff contains trash, nutrients, bacteria, and other pollution which affects the water quality - and our drinking water supply.	Rationale: Improper containment and disposal of waste continue to be a source of stormwater pollution		
	location of non-stor covered should over	20% of known outfalls p mwater discharges and rlap with areas of previ , CRC4, CRC6, CRC7, PD	to identify what the ous development to l	discharge material(s ocate previously un	s) is (are). Areas mapped outfalls.		
7	Topic Emphasis: Get the library of background materials found in the various waterway from the Bella Vista Village POA Water Department samples of past water collections.	Topic Emphasis: Have Bella Vista Village POA V results to relevant libral Trace all discharges bac existing code enforcem	Water Department treatry and do additional repk to source. Educate pe	ment plant laboratory orting of discharge if r	personnel. Add equired by law.		

NAD#	PERMIT YEAR							
MP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	Topic Emphasis: Get the library of chemicals and other parameters found in the Bella Vista Village POA Water Department pretreatment samples of past water collections. Topic Emphasis: Have all unknown/unidentified solids collected and tested by proper personnel. If required, report solids location. Remove solids by properly trained personnel. Educate personnel on source site and/or apply existing code enforcement options.							
	Target Audience: City and RWU employees and contract companies for dry-weather screenings of know outfalls. Engineers, designers, contractors, builders and other construction community personnel on new outfalls.							
	Rationale: When a discharge has been reported, knowing the upstream system from the report can make it easier to track back to locate the source of the discharge.							

Minimum Control Measure #4: Construction Site Runoff Regulations and Controls

Permit Requirements:

"The permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the permittee's small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the permittee's program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more." For stormwater discharges associated with any construction activity must comply with 40 CFR §122.26(b)(15)(i) by developing, implementing, and enforcing a program to reduce pollutant discharges from such sites. The permittee's program must include the development and implementation of, at a minimum:"

- An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under Federal, State or Local laws:
- Requirements for site operators to implement appropriate erosion and sediment control Best Management Practices;
- Requirements for construction site operators to prevent or control waste that may cause
 adverse impacts to water quality such as building materials and their packing systems,
 concrete truck washout, chemicals, litter, equipment & fluid leaks, and sanitary waste at the
 construction site;

- Procedures for site plan review and land division that incorporate measures to prevent or control potential water quality impacts;
- Procedures for receipt and consideration of information submitted by the public; and
- Procedures for site inspection and enforcement of control measures.

Applicable City BIMPs

Construction Regulations and Controls (CRC):

CRC1 - Ordinance: Reviews and Revisions

CRC2 - Plan Reviews

CRC3 - Drainage Manual

CRC4 - Site Inspections

CRC5 - Complaint Reporting and Response System

CRC6 - Enforcement

CRC7 - City Staff Training

BMP Explanation

- CRC1: <u>Ordinance</u>: Reviews and Revisions. Periodic reviews and revisions to stormwater ordinances are needed to keep the ordinance, its enforcement actions, and any related items up-to-date with the state and federal regulations that are in affect. This BMP also can be partnered with BMP PEO5; PIP3; IDDE1; IDDE6; PDS1; PDS3; O&M1; and O&M2.
- CRC2: <u>Plan Reviews</u>. Plans for large-scale developments, subdivisions, and large-scale waivers are reviewed to see how well they adhere to the City of Bella Vista' development requirements. Once approved, grading permits must be applied for and those requirements also met before ground can be broken on any site. Development plans not involving disturbance of any ground surface (including existing concrete and asphalt pavements) require Building Inspections review and approval. This BMP also can be partnered with BMP PIP3 and PDS4.
- CRC3: <u>Drainage Manual</u>. Adopt and implement a new drainage manual with updated stormwater design and runoff prevention requirements. This BMP also can be partnered with BMP PIP3; PDS2; and PDS3.
- CRC4: <u>Site Inspections</u>. Weekly site inspections(at a minimum) with at least one monthly documented inspection of construction and other development sites can answer questions, resolve potential problems, and prevent failures of stormwater preventative measures as well as structural items that could result in stop work orders, delay in inspections (and approvals to continue), and increase cost of completing the project. This BMP also can be

partnered with BMP IDDE4; IDDE6; IDDE7; PDS5; PDS6; PDS7; PDS8; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. Sites receiving complaints are given priority for next-available inspection time over regular site visits and/or inspections.

- CRC5: <u>Complaint Reporting and Response System</u>. A system for citizens to report suspect discharges will be created so city personnel can respond, review, and see that clean-up takes place in a timely manner specified and documented by the responding city personnel. Enforcement may need to also follow-up on reports. Sites receiving complaints are given priority for next-available inspection time over regular site visits and/or inspections. The system will annually be monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator. This BMP also can be partnered with BMP PEO5; PIP1; PIP2; PIP3; IDDE2; IDDE3; PDS5; PDS6; PDS7; PDS8; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. All materials will be made available in both English and non-English languages.
- CRC6: <u>Enforcement</u>. Prevention of large problems begins with education of owner/operators and prevention of small messes. Unfortunately, sometimes only enforcement can stop the reoccurrence of events. This BMP also can be partnered with BMP IDDE4; IDDE6; IDDE7; PDS5; PDS6; PDS7; PDS8; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. All materials will be made available in both English and non-English languages.
- CRC7: <u>City Staff Training</u>. Training multiple department staffs puts more eyes "on the ground" for finding, reporting, and/or responding to sites where permits and control requirements are not being met. This BMP also can be partnered with BMP PIP1; PIP3; IDDE4; IDDE6; IDDE7; PDS5; PDS6; PDS7; PDS8; PDS9; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6.

Rationale

The City selected the above BMPs to address each component of the construction site runoff control requirements. Regulatory authority for implementation and enforcement of the City's erosion and sediment control program is provided in the Stormwater Ordinance, Municipal Codes, and other adopted guidelines. These Codes and guidelines provide a framework for oversight of erosion and sediment control measures during construction or redevelopment of any site. This permit creates documentation of new housing sites, provides an avenue for pre-construction meetings, and produces a format for random site reviews. Specific requirements for construction site operators are addressed during the Site Plan Reviews, Grading Permit application processes, Technical Plat Reviews, SWPPP review processes, and are included in the City's Design Criteria as referenced in the Development Code. The Stormwater Ordinance requires the development of erosion and sediment control plans and will be updated to include issues provided by the updated ARR040000. Additionally, the nuisance prohibitions section of the Code of Ordinances provide authority to regulate construction sites to prevent or control wastes that can adversely impact water quality. Training of City staff to recognize and correct erosion problems on construction sites and to enforce the provisions of the City's adopted ordinances is a critical component of the

continuous and on-going stormwater management program.

Responsible Parties

The City's Planning, Building, and Code Enforcement Department maintains the portion of the Municipal Code of Ordinances related to construction and coordinates the Site Plan and Drainage Review process. The Planning Department staff is responsible for implementation and inspection of approved land alteration and development projects for overall development criteria as well as erosion and sediment control and construction site runoff controls. Other departments' personnel help the Planning Department become aware of land disturbances that are occurring but may not have been through the plan review process. Enforcement of these areas of the City's Codes is conducted in coordination with the Code Enforcement and Police Departments - and with the Office of the City Attorney, if necessary.

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator. The measurement of success of the program will be based on tracking of compliance and avoidance of impacts to water quality from land alteration and construction. Specific measureable goals during the 5-year permit period include, but are not limited to:

- Revise existing ordinances to meet new federal and state permit requirements;
- Review, comment, and/or approve a plan review for each set of documents submitted;
- Adopt a new drainage manual and begin to use in plan reviews within 3 months of adoption;
- Visit, review, and comment on status of each site under construction;
- Document and respond to a minimum of 90% of all complaints (that are not related to flooding);
- Document and respond to 80% of all neighborhood flooding complaints;
- Document all enforcement actions taken (from discussions on construction sites to formal education settings to stop work orders to fines); and
- Perform and document all annual employee training sessions.

Summary of Development/Implementation Schedule

ВМР#	PERMIT YEAR						
2111111	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18		
	1	stormwater, gradir 5, CRC1, PDS1, PDS3		and tree ordinance as 2)	needed. (PEO5,		
	Topic Emphasis: Review existing ordinance for master Municipal Code revisions.	Topic Emphasis: Monitor existing ordinance for new (August 2009) MS4 permit requirements.	Topic Emphasis: Draft revisions to existing ordinance due to new (August 2009) MS4 permit requirements.	Topic Emphasis: Monitor, review, and draft any revisions needed due to NWA Construction BMP manual adoption.	Topic Emphasis: Monitor, review, and draft any revisions needed due to new EPA MS4 permit (adopted 2012) requirements.		
CRC1	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff		
	Rationale: Check for completeness of ordinance due to relocation within Municipal Code.	Rationale: Check for "shortages" between existing ordinance and new permit requirements.	Rationale: Remove "shortages" between existing ordinance and new permit requirements.	Rationale: Remove un-permitted and add new allowed BMPs per newly adopted BMP manual.	Rationale: Prepare for new federally required requirements that will be applicable with next state permit.		
	1	ent on every large- ubmitted for develo	•	plan, large-scale waiv , and PDS4)	er, and/or		
co.co	Review, comment, and approve or deny each grading permit requested. Grading permits require an approved set of plans. (PIP3, CRC2, and PDS4)						
CRC2	Topic Emphasis: Is	each site an example	of pollution preventi	on while being a "good	neighbor"?		
	Target Audience: Municipal staff; Construction community (consulting engineers, project managers, contractors, developer, and other personnel); Green Industry (landscape architects, and landscaping companies, and lawn care professionals); homeowners; residents; as well as Industrial and commercial business owners						

BMP#			PERMIT YEAR						
BIVIP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18				
	Rationale: Requiring submitted plans to show and/or explain how Bella Vista' sediment and erosion control requirements will be met on development sites provides city staff, planning commission, city council, appropriate city committees, the construction community, business owners, and adjoining properties owners and residents to all be aware of the size and scope of the project and the expected controls that will be used to prevent sediment and other erosion from leaving the project site.								
CRC3	Finish the drafting of the new drainage manual (DM).	Hold a minimum of 3 public meetings for review, comments, questions, and answers on new DM. (PIP3, CRC3, PDS2, and PDS3)	Submit new DM to City Council for adoption. "Begin" enforcing those sections that are unchanged from previous version. (PIP3, CRC3, PDS2, and PDS3)	Implement and enforce new DM. (PIP3, CRC3, PDS2, and PDS3)	Evaluate, review, and revise DM as needed.				
	Topic Emphasis: Differences betwee the previous drainage manual and the new one.		Topic Emphasis: Track land alterations and any impacts to drainage basin annually.	Topic Emphasis: Evaluate and amend as needed to achieve compliance with state permit.	Topic Emphasis: Program review an assessment.				

BMP#			PERMIT YEAR					
BMP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	Target Audience: Municipal staff	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Municipal staff			
	Rationale: Education on requirements provides prevention so that events don't occur.							
	construction and resolve potential PDS8, O&M1, O& priority for next-a	other development problems, and preve M2, O&M3, O&M4, vailable inspection t	locations to observent failures. (IDDE4, O&M5, and O&M6 time over regular site.	cumented monthly in e site BMP conditions IDDE6, IDDE7, CRC4,) Sites receiving comp te visits and/or inspec nguages for site work	, answer questions, PDS5, PDS6, PDS7, plaints are given ctions. All materials			
CRC4	Topic Emphasis: Conduct inspections on an on-going basis.	Topic Emphasis: Implement existing Code authority on an ongoing basis.	Topic Emphasis: F	Review and amend the (Code as appropriate.			
	_	Planning Dept., Buildi prcement, Street Dept		ne Bella Vista Village PO needed	A Water Department			
				s "on the ground" for fin ments are not being met				

BMP#			PERMIT YEAR					
DIVII II	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	Encourage Bella Vista' residents and businesses to report to City Hall suspected illegal dumping and suspect liquid discharges in and near construction and development areas. (PEO5, PIP1, PIP2, PIP3, IDDE2, IDDE3, CRC5, PDS5, PDS6, PDS7, PDS8, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)Sites receiving complaints are given priority for next-available inspection time over regular site visits and/or inspections.							
	Topic Emphasis: Create and adopt system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges within city limits.	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Monitor, review and revise as needed the system for citizen reports and municipal responses to suspected dumping and suspicious liquid discharges.	Topic Emphasis: Water quality monitoring	Topic Emphasis: Stream clean-ups			
		Topic Emphasis: Implement and enforce existing codes.						
CRC5	Target Audience: Urban creek-side landowners and their family members; All materials will be made available in both English and non-English languages	Target Audience: Urban homeowners; All materials will be made available in both English and non-English languages	Target Audience: Property owners and residents along paved streets with storm drains; All materials will be made available in both English and non-English languages	Target Audience: All residents and businesses receiving drinking water from the Bella Vista Village POA Water Department (a private company); All materials will be made available in both English and non-English languages	Target Audience: Bella Vista' resident and property owners along urbar creeks and streams All materials will be made available in both English and non-English languages			
	Rationale: Support green infrastructure educational emphasis promoting urban greenways for stormwater management	Rationale: Over- fertilizing and over-watering of landscaping and lawns increases the amounts of polluted waters into our creeks and streams.	Rationale: Storm drain stenciling supports the "storm drain dumping" educational priority for 2012.	runoff contains trash, nutrients, bacteria, and other pollution which affects the water	Rationale: Improper containment and disposal of wastes continue to be a source of stormwater pollution.			

вмр#	PERMIT YEAR							
DIVII W	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	Prevention of large problems begins with education of owner/operators and prevention of small messes. Unfortunately, sometimes only enforcement can stop the reoccurrence of events. (IDDE4, IDDE6, IDDE7, CRC6, PDS5, PDS6, PDS7, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)							
CRC6	Topic Emphasis: Get the library of background materials found in the various waterway from the Bella Vista Village POA Water Department samples of past water collections. Topic Emphasis: Get the library of chemicals and other parameters found in the Bella Vista Village POA Water Department samples of past water collections. Topic Emphasis: Annually review Report and Response System for repeat violators of ordinance (location; owner/operator; other individual). Apply existing code enforcement options. Topic Emphasis: Implement and enforce existing codes. Target Audience: Planning Dept. and Building Inspections primarily; Code Enforcement, Street Dept., and							
	Police Dept. as need Rationale: Training	led 3 multiple department	staffs puts more eye.	s "on the ground" for fir nents are not being met	nding, reporting,			
	Conduct new hire and annual employee training. (PIP1, PIP3, IDDE4, IDDE6, IDDE7, CRC7, PDS5, PDS6, PDS7, PDS8, PDS9, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)							
CRC7	Topic Emphasis: Obtain training DVD's. Conduct annual training for employees.	Topic Emphasis: Review and update materials. Conduct training for new hires.	Topic Emphasis: Review and update materials. Conduct annual training.	Topic Emphasis: Review and update materials. Conduct training as necessary for new hires.	Topic Emphasis: Review and update materials. Conduct annual training.			
		 Planning Dept.; Buildi ipal Airport; Police De	-	Dept.; Recreations Dep	t.; Code Enforcement;			
	1			s "on the ground" for fin nents are not being met				

Minimum Control Measure #5: Post-Development Construction Standards

Permit Requirements:

The permittee must:

- Develop, implement, and enforce a program to ensure reduction of pollutants in storm
 water runoff to the maximum extent practicable (MEP) from new development and
 redevelopment projects within the permittee's jurisdiction that disturb one acre or more,
 are part of a larger common plan of development or sale, and/or discharge into the
 permittee's small MS4. The permittee's program must ensure that developers are aware
 that controls needed to prevent and minimize water quality impacts.
- Develop and implement strategies that include a combination of structural and/or nonstructural BMPs appropriate for the permittee's community.
- Use an ordinance or other legal regulatory mechanism to address construction and postconstruction runoff from new and re-development projects to the maximum extent allowable under Federal, State and/or Local laws.
- Ensure adequate long-term operation and maintenance of permanent and long-term BMPs;
 and
- Ensure adequate enforcement of ordinance or alternative regulatory program.

Applicable City BMPs

Post-Development Standards (PDS):

PDS1 - Ordinance: Reviews and Revisions

PDS2 - Drainage Manual

PDS3 - Post Construction Requirements

PD\$4 - Plan Reviews

PDS5 - Maintenance and Inspections

PDS6 - Enforcement

PDS7 - Long-Term Operations and Management Plans

PDS8 - Pollution Control Guidelines (PCG) and Stormwater Facilities Master Plan (SFMP)

PDS9 - Low Impact Development (LID)

BMP Explanation

PDS1: Ordinance: Reviews and Revisions. Periodic reviews and revisions to stormwater ordinances

- are needed to keep the ordinance, its enforcement actions, and any related items up-to-date with the state and federal regulations that are in affect. This BMP also can be partnered with BMP IDDE1; IDDE6; CRC1; O&M1; and O&M2.
- PDS2: <u>Drainage Manual</u>. Adopt and implement a new drainage manual with updated stormwater design and runoff prevention requirements. This BMP also can be partnered with BMP PIP3; CRC3; and PDS3.
- PDS3: <u>Post Construction Requirements</u>. Review and revise stormwater, grading, erosion control, and tree ordinance as needed for post-construction requirements. This BMP also can be partnered with BMP PIP3; IDDE1; IDDE6; CRC1; CRC3; PDS1; PDS2.
- PDS4: <u>Plan Reviews</u>. Plans for large-scale developments, subdivisions, and large-scale waivers are reviewed to see how well they adhere to the City of Bella Vista' development requirements. This BMP also can be partnered with BMP PIP3; CRC2; PDS2; PDS3; and PDS4.
- PDS5: <u>Maintenance and Inspections</u>. Regular maintenance and inspections of post-construction stormwater controls can answer neighborhood questions, resolve potential purpose and usage problems, and prevent failures. This BMP also can be partnered with BMP PEO4; PEO5; PIP2; IDDE2; IDDE3; IDDE4; IDDE5; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. All materials will be made available in both English and non-English languages.
- PDS6: <u>Enforcement</u>. Prevention of large problems begins with education of owner/operators and prevention of small messes. Unfortunately, sometimes only enforcement can stop the reoccurrence of events. This BMP also can be partnered with BMP PEO5; IDDE2; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. All materials will be made available in both English and non-English languages.
- PDS7: <u>Long-Term Operations and Management Plans</u>. Agreements that private property owners, property- or home-owner associations, and/or developers have with the City of Bella Vista stating that the maintenance and operation of post-construction BMPs will be paid for and overseen by the non-government party. Agreements give the City of Bella Vista the right to periodically inspect the BMP and to enforce maintenance, repairs, replacement, upgrades, improvements, and/or other actions to preserve the purpose and function of the BMP. This BMP also can be partnered with BMP PEO4; PEO5; PEO6; PIP2; PIP3; IDDE4; IDDE5; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; O&M1; O&M2; O&M3; O&M4; O&M5; and O&M6. All materials will be made available in both English and non-English languages.
- PDS8: <u>Pollution Control Guidelines and Stormwater Facilities Master Plan</u>. Handy references if employees need to deal with some sort of spill or other non-hazardous pollution clean-up that is not part of their regular duties. This BMP also can be partnered with BMP PEO5; PEO6; PIP2; PIP3; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; O&M1; O&M2; O&M3; O&M4;

O&M5; and O&M6. All materials will be made available in both English and non-English languages.

PDS9: <u>Low Impact Development</u>. Other methods and options exist that will minimize the impact of stormwater runoff from development. This BMP also can be partnered with BMP PEO4; PEO5; PEO6; PIP2; PIP3; IDDE5; CRC7; O&M1; O&M2; O&M3; O&M5; and O&M6. All materials will be made available in both English and non-English languages.

Rationale

The City selected the above BMPs to meet the post-construction Minimum Control Measure requirements. The City Code of Ordinances, new section "Development" that combined all requirements into a single chapter (14), requires that new developments incorporate stormwater management to reduce the impacts associated with stormwater runoff generated at the site. PDS1, PDS2, PDS3, and PDS4 provide for maintenance of the appropriate Code of ordinances requirements and the more specific design requirements included in the Bella Vista Drainage Manual, such that pollutants from stormwater runoff from new development are reduced to the maximum extent practicable, in compliance with the requirements of this Minimum Control Measure. PDS3, PDS5, PDS6, and PDS7 work together to provide for the development of a long-term inspection and enforcement program. PDS8 was selected to address opportunities for implementing water quality improvement projects associated with retrofits to and expansion of the existing stormwater drainage system. This BMP will support publicly-funded and managed water quality improvement networks to supplement the reduction of pollutants associated with increased stormwater runoff from a growing urban environment. PDS9 will develop options for development that meet other city requirements (drainage runoff, design reviews, etc.) but that will be low impact during and after construction.

Responsible Parties

- Planning, Building, and Code Enforcement Department
- Street Department
- Police Department

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator.

The regulatory framework for control of post-construction stormwater runoff is contained in the Code of Ordinances and Bella Vista Drainage Manual. This framework will be refined and expanded

as needed to improve the City's capability to achieve reductions in stormwater pollution from new developments through periodic evaluations and updates to the Codes. Measurable goals during the 5-year permit period include, but are not limited to:

- Revise existing ordinances to meet new federal and state permit requirements;
- Review, comment, and/or approve a plan review for each set of documents submitted;
- Adopt a new drainage manual and begin to use in plan reviews within 3 months of adoption;
- Public education and outreach events will be coordinated to educate property and homeowner associations on their operational and maintenance requirements in general as well as for specific BMPs not covered in the general events;
- Develop and implement Pollution Control Guidelines (PCG) for each city-owned or operated site;
- Create a city-wide Stormwater Facilities Master Plan summarizing and containing each PCG;
 and
- Develop and implement optional methods, criteria, and standards for low-impact stormwater development and low-income housing.

Summary of Development/Implementation Schedule

BMP#	PERMIT YEAR							
DIVII II	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	l .	stormwater, grading, 1, O&M1, and O&M2)		tree ordinance as nee	eded. (IDDE1,			
	Topic Emphasis: Review existing ordinance for master Municipal Code revisions.	Topic Emphasis: Review existing ordinance for new (August 2009) MS4 permit requirements.	Topic Emphasis: Draft revisions to existing ordinance due to new (August 2009) MS4 permit requirements.	Topic Emphasis: Review and draft any revisions needed due to NWA Construction BMP manual adoption.	Topic Emphasis: Review existing ordinance for new EPA MS4 permit (adopted 2012) requirements.			
PDS1	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff			
	Rationale: Check for completeness of ordinance due to relocation within Municipal Code.	Rationale: Check for "shortages" between existing ordinance and new permit requirements.	Rationale: Remove "shortages" between existing ordinance and new permit requirements.	Rationale: Remove un-permitted and add new allowed BMPs per newly adopted BMP manual.	Rationale: Prepare for new federal requirements that will be applicable with next state permit.			

ВМР#			PERMIT YEAR		
	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18
	Finish the drafting of the new drainage manual (DM) (previous version dated 1998).	Hold a minimum of 3 public meetings for review, comments, questions, and answers on new DM. (PIP3, CRC3, PDS2, and PDS3)	Submit new DM to City Council for adoption. "Begin" enforcing those sections that are unchanged from previous version. (PIP3, CRC3, PDS2, and PDS3)	Implement and enforce new manual. (PIP3, CRC3, PDS2, and PDS3)	Evaluate, review, and revise DM as needed.
		Differences between age manual and the	Topic Emphasis: Track land alterations and any impacts to drainage basin annually.	Topic Emphasis: Evaluate and amend as needed to achieve compliance with state permit.	Topic Emphasis: Program review and assessment.
PDS2	Target Audience: Municipal staff	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff; All materials will be made available in both English and non-English languages	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Municipal staff
	Rationale: Educat	tion on requirements pro	ovides prevention so tha	t events don't occur.	
PDS3	1	e stormwater, grading uirements. (PIP3, IDDE	,		eded for post-

BMP#			PERMIT YEAR				
BMP#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18		
	Topic Emphasis: Review existing ordinance for master Municipal Code revisions.	Topic Emphasis: Review existing ordinance for new (August 2009) MS4 permit requirements.	Topic Emphasis: Draft revisions to existing ordinance due to new (August 2009) MS4 permit requirements.	Topic Emphasis: Review and draft any revisions needed due to NWA Construction BMP manual adoption.	Topic Emphasis: Review existing ordinance for new EPA MS4 permit (to- be-adopted in 2012) requirements.		
	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff	Target Audience: Planning Dept. Staff		
	Rationale: Check for completeness of ordinance due to relocation within Municipal Code.	Rationale: Check for "shortages" between existing ordinance and new permit requirements.	Rationale: Remove "shortages" between existing ordinance and new permit requirements.	Rationale: Remove un-permitted and add new allowed BMPs per newly adopted BMP manual.	Rationale: Prepare for new federal requirements that will be applicable with next state permit.		
	Review and comment on every large-scale development plan, large-scale waiver, and/or subdivision plan submitted for development. (PIP3, CRC2, PDS2, PDS3, PDS4)						
			y each grading permit , CRC2, PDS2, PDS3, P	requested. Grading p	permits require		
	Topic Emphasis: H wants?"	low is each site an exam	ple of pollution prevent	tion while being the "go	od neighbor everyone		
PDS4	contractors, develor and lawn care profe	per, and other personne ssionals); homeowners;	l); Green Industry (land	ulting engineers, project scape architects, and lar dustrial and commercial nguages	ndscaping companies,		
	requirements will be appropriate city con and residents to all	e met on development s nmittees, the constructi	sites provides city staff, on community, busines d scope of the project ar	Bella Vista' sediment ar planning commission, ci s owners, and adjoining nd the expected controls	ty council, properties owners		
PDS5	neighborhood que PEO5, PIP2, IDDE2	estions, resolve poten	itial purpose and usag 5, IDDE6, IDDE7, CRC4	tormwater controls ca ge problems, and prev 1, CRC5, CRC6, CRC7, I	ent failures. (PEO4,		
	Topic Emphasis: Conduct inspections on an on-going basis.	Topic Emphasis: Implement existing Code authority on an ongoing basis.	Topic Emphasis: Rev	view and amend the Coo	de as appropriate.		

BMP#	PERMIT YEAR							
DIVIE	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	enforcement; prope	Planning Dept. and Streety-owner associations amaterials will be made a	and other private indivi	duals with post-constru	ction stormwater			
	responding to sites v	Rationale: Training multiple department staffs puts more eyes "on the ground" for finding, reporting, and/or responding to sites where permits and control requirements are not being met. Educating property-owners of their responsibilities prevents unexpected operational and/or maintenance problems, disasters, back-ups, and/or flooding.						
	messes. Unfortuna	e problems begins wi ately, sometimes only 5, IDDE7, CRC4, CRC5,	enforcement can sto	p the reoccurrence o	f events. (PEO5,			
PDS6	PDS6 Topic Emphasis: Get the library of background materials found in the various waterway from the Bella Vista Village POA Water Department samples of past water collections. Topic Emphasis: Get the library of chemicals and other parameters found in the Bella Vista Village POA Water Department pretreatment samples of past water collections. Topic Emphasis: Annually review Report and repeat violators of ordinance (location; owner/individual). Apply existing code enforcement or individual.							
	Target Audience: Police Dept. as need	Planning Dept. and Builded	l ding Inspections primar	ily; Code Enforcement,	Street Dept., and			
		multiple department so where permits and cont			g, reporting, and/or			
	Correctly maintaining (public and/or private) post-construction BMPs by their respective owner (PEO4, PEO5, PEO6, PIP2, PIP3, IDDE4, IDDE5, IDDE6, IDDE7, CRC4, CRC5, CRC6, CRC7, PDS7, O&N O&M2, O&M3, O&M4, O&M5, and O&M6)							
PDS7	Topic Emphasis: Sediment & Erosion Control, LID, and Green Infrastructure	Topic Emphasis: Landscape stormwater management and water conservation	Topic Emphasis: Storm drain dumping and waste disposals	Topic Emphasis: Pet waste pick-up	Topic Emphasis: Proper use, handling, and disposal of household hazardous wastes			

IP#	PERMIT YEAR							
#	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18			
	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff; All materials will be made available in both English and non- English languages	Target Audience: Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Minority residents and business owners; All materials will be made available in both English and non-English languages	Target Audience: Residents and pet owners; All materials will be made available in both English and non-English languages	Target Audience: Approximate 1600-known Industrial, Institutional, and Commercial users of Bella Vista Village POA Water Department (private municipal water and sewer provider)			
	and/or private) post can allow water to in groundwater table; various pollutants; ri velocity of stormwat aesthetically-pleasin	nfiltrate back to the remove and/or treat	Rationale: 2010 census date will reveal minority residents are an under-served audience needing stormwater information.	Rationale: Recent newsletters, displays and presentations have revealed an ignorance of the volume and impact of pet waste pollutants on urban stormwater quality.	Rationale: Misuse and improper disposal (in sink, toilet, storm drain, and ditch) continue to be a source of stormwater pollution.			
	Develop and implement Pollution Control Guidelines (PCG) for each city-owned or operated s (PEO5, PIP3, IDDE6, IDDE7, CRC4, CRC5, CRC6, CRC7, PDS8, O&M1, O&M2, O&M3, O&M4, O& and O&M6)							
8	Create a Stormwater Facilities Master Plan should summarize and/or contain a copy of each PC (PEO5, PEO6, PIP2, PIP3, IDDE6, IDDE7, CRC4, CRC5, CRC6, CRC7, PDS8, O&M1, O&M2, O&M3, O&M4, O&M5, and O&M6)							
	Topic Emphasis: C Control Guidelines (I owned or maintaine	PCG) for each city-	Topic Emphasis: Create and adopt overall City Stormwater Facilities Master Plan (SFMP)	Topic Emphasis: Imp through developer an training programs.				

BMP#	PERMIT YEAR				
	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18
	Target Audience: Municipal staff	Target Audience: Municipal staff	Target Audience: Municipal staff	Target Audience: Co community (consultin managers, contractors other personnel) and (landscape architects, companies, and lawn materials will be made English and non-Englis	g engineers, project s, developer, and Green Industry and landscaping care professionals); Al e available in both
	clean their site and	other city facilities clean	. Experienced employe	easier for new employed es will find the PCG a ha on clean-up that is not p	ndy reference if they
	Low-Impact Development and other development options (PEO4, PEO5, PEO6, PIP2, PIP3, IDDE5, CRC7, PDS9, O&M1, O&M2, O&M3, O&M5, and O&M6)				
	Topic Emphasis: Identify low- impact development impediments.	Topic Emphasis: Develop optional methods, criteria, and standards for reducing or removing these impediments for LID and low-income housing.	Topic Emphasis: Adopt the methods, criteria, and standards developed in years 2009 through 2011.	Topic Emphasis: Implement the methods, criteria, and standards developed in years 2009 through 2011.	Topic Emphasis: Continue to identify monitor, report, revise, and remove impediments to LID and low-income housing.
PDS9	Target Audience: Municipal staff	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and municipal staff; All materials will be made available in both English and non-English languages	Target Audience: Construction community (consulting engineers, project managers, contractors, developer, and other personnel) and Green Industry (landscape architects, and landscaping companies, and lawn care professionals) and homeowners; All materials will be made available in both English and non-English languages	Target Audience: Municipal staff

вмр#	PERMIT YEAR					
	YR 13-14	YR 14-15	YR 15-16	YR 16-17	YR 17-18	
	Rationale: Other methods and options exist that will minimize the impact of stormwater runoff from development. These methods and options may not currently be ordinance or construction-friendly nor meet all the development requirements. Removing these issues from the development process should allow a greater number of development opportunities.					

Minimum Control Measure #6: Operation Maintenance for Pollution Prevention in Municipal Operations

Permit Requirements:

The permittee must:

- Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations;
- Using training materials and/or programs that are available, train employees to prevent and reduce stormwater pollution from activities including, but not limited to, park and open space maintenance, fleet and building maintenance, new municipal facility construction and related land disturbances, design and construction of street and storm drain systems, and stormwater system maintenance; and
- Develop a list of city-owned or operated sites with industrial activities that are subject to
 ADEQ's Industrial Stormwater General Permit or individual NPDES permits for discharges of
 stormwater associated with industrial activity that ultimately discharge to the MS4. Include
 the ADEQ permit number or a copy of the Industrial NOI form for each facility. For the
 municipal facilities that conduct activities described in 40 CFR 122.26(b)(14) that are not
 required to obtain Industrial Stormwater General Permit coverage shall develop and
 implement a Stormwater Pollution Prevention Plan (SWPPP) of coverage being granted
 under this permit. The SWPPP shall conform to the requirements of ADEQ's Industrial
 Stormwater General Permit in effect at the time coverage under this permit is granted.

Applicable City BMPs

Operation and Maintenance (O&M):

O&M1 - Employee training

O&M2 - Operation and Maintenance program

O&M3 - Pollution Control Guidelines (PCGs) and City-wide Stormwater Facilities Master Plan (SFMP)

O&M4 - Disposal of Wastes including street sweepings

- O&M5 Minimizing the Use of Potential Pollutants
- **O&M6** Open Channel Assessment including flood management/water quality projects

BMP Explanation

- O&M1: <u>Employee training</u>. Training multiple department staffs puts more eyes "on the ground" for finding, reporting, and/or responding to sites where requirements are not being met. This BMP also can be partnered with BMP PEO5; IDDE1; IDDE2; IDDE6; CRC1; CRC4; CRC5; CRC6; CRC7; PDS1; PDS5; PDS6; PDS7; PDS8; and PDS9.
- O&M2: <u>Operation and Maintenance program</u>. Implement and review the existing O&M program for each city-owned or operated site. Revise and upgrade as needed. This BMP also can be partnered with BMP PEO1; PEO2; PEO5; IDDE1; IDDE2; IDDE6; IDDE7; CRC1; CRC4; CRC5; CRC6; CRC7; PDS1; PDS5; PDS6; PDS7; PDS8; and PDS9.
- O&M3: <u>Pollution Control Guidelines and Stormwater Facilities Master Plan</u>. Handy references if employees need to deal with some sort of spill or other non-hazardous pollution clean-up that is not part of their regular duties. This BMP also can be partnered with BMP PEO1; PEO2; PEO5; IDDE2; IDDE4; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; PDS5; PDS6; PDS7; PDS8; and PDS9.
- O&M4: <u>Disposal of Wastes</u>. Regardless of the job, wastes will be created. Correctly disposing of them prevents: damage to equipment and/or infrastructure; potential pollution runoff if materials come into contact with stormwater; flooding; slips and/or falls; and other incidents. This BMP also can be partnered with BMP PEO5; IDDE2; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; PDS5; PDS6; PDS7; and PDS8.
- O&M5: <u>Minimizing the Use of Potential Pollutants</u>. Minimizing and/or reducing the use certain potential pollutants (such winter's road salt, sand, and runway deicer; pesticides; herbicides; fertilizers) decreases the risk of a spill and the need for containment equipment. Options to their use should be undertaken to better understand their need. Containments should be regularly reviewed for soundness, breaks, leaks, repairs, and/or replacements. This BMP also can be partnered with BMP PEO1; PEO2; PEO5; PEO6; IDDE2; IDDE3; IDDE4; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; PDS5; PDS6; PDS7; PDS8; and PDS9.
- O&M6: <u>Open Channel Assessment including flood management/water quality projects</u>. Provide an assessment of known open channel conditions as well as outfall connections to the channels. This BMP also can be partnered with BMP PEO4; PEO5; PEO6; PIP2; PIP3; IDDE2; IDDE3; IDDE4; IDDE5; IDDE6; IDDE7; CRC4; CRC5; CRC6; CRC7; PDS5; PDS6; PDS7; PDS8; and PDS9.

Rationale

As part of the contract with Northwest Arkansas Regional Planning and the University of Arkansas' Cooperative Extension Service, Cooperative Extension Service employees will provide training at

least once a year to MS4s. The training will use materials provided by ExCal Visuals and others that include information on construction sites, park & open space maintenance, and fleet & building maintenance. Jurisdictional-specific ordinances, policies, and mandates will also be addressed during these trainings and specific system maintenance as departmentally appropriate. Training will stress how the employees are the "eye and ears" of the city and that they should learn to recognize signs of illicit discharge and how to properly report these instances. Recommendations from these employees are also discussed during the regional stormwater compliance committee's monthly meetings to help to shape the educational outreach messages for future presentations.

The City selected the above six BMPs to address Pollution Prevention in Municipal Operations. O&M2 and O&M3 include:

- Implementation of a Pollution Control Manual for City Facilities; and
- Continue scheduled evaluations of City practices. Develop or revise pollution control manuals or procedures as appropriate.
- Review and revision of vehicle maintenance and cleaning practices and procedures, as appropriate.
- Review and revision of site-specific items: material storage; waste clean-up and removal; manuals, practices and procedures, as appropriate.

A Pollution Control Guidelines (PCGs) will be developed for each City site to improve maintenance operations as appropriate and provide evaluation standards when reviewing each site for potential impacts to stormwater (O&M2). The guidelines for each site will then be put into a City-wide Stormwater Facilities Master Plan (SFMP) with the intent to meet State and/or Federal regulatory programs (O&M3). Training for employees will also be outlined in the City's Pollution Control Manual for City Facilities and will focus on stormwater quality management practices. A list of 14 suspected Municipal Facilities (or category/types) can be found on Page 9 of the MS4 Annual Report covering calendar year 2010 - which is Appendix E.2.a. Not all of the category/type facilities may need an *independent* PCG (i.e. each city park won't need its own unless it has some special stormwater-related issue), but each category/type will definitely be addressed as part of the overall SFMP.

O&M4 addresses disposal of wastes (including street sweepings) as a pollution control practice, and includes an assessment and evaluation of existing practices and implementing improved practices as appropriate. O&M5 will address annual reviews of ways the materials used that are potential pollutants can be replaced by non-potential pollutants or use of the materials can be reduced to reduce and/or eliminate the quantity of materials stored by City service providers. O&M6 provides an updated assessment of open channel conditions. This assessment will assist the City in prioritizing capital improvements and maintenance activities that improve open channel stormwater quality functions throughout the city. Each of the BMPs aims to prevent or reduce pollutants contained in urban stormwater runoff from municipal operations.

Responsible Departments

- Planning, Building, and Code Enforcement Department
- Street Department
- Police Department
- Fire Department
- Bella Vista Village POA Water Department
- University of Arkansas' Cooperative Extension Service (contract for employee training elements)

Summary of Measurable Goals

The goals below were selected to correspond with goals from the previous permit cycle to that progress could continue towards achieving reductions and eliminations of non-stormwater discharges to the stormwater system. Some previous goals were divided into separate tasks to better review progress on each while other objectives were more clearly defined so that the assigned personnel have a better idea of what is involved in completing the task. All goals will be annually monitored, reviewed, evaluated and assessed by an individual within the Planning Department with stormwater oversight, but not by the program's coordinator.

University of Arkansas Cooperative Extension Service staff will oversee annual and new hire employee stormwater trainings, per their education contract. The Planning Department staff with help from the Facilities Manager will oversee the creation and implementation of all manuals, guidelines, and plans listed as well as material and method assessments and reviews. The goals listed below were partially selected by the Cooperative Extension Service's staff that is under contract for our educational portions of our permit, but the MS4 representatives approved the quantity for each goal. Goal quantities were based on the percent of the Urbanized Area within the municipality so larger cities will have more stringent requirements (both in size and quantity) than a neighboring and/or adjoining small town may have. The City of Bella Vista shall oversee these efforts and will address any and all short-falls of the contract product to ensure that all permit requirements are met. The City's various departments will coordinate with various community and watershed groups for other educational and outreach activities beyond the scope of the Cooperative Extension Service's educational contract for employee training.

Specific measureable goals during the 5-year permit period include, but are not limited to:

- Annual employee training;
- Develop and implement Operational and Maintenance Guidelines for each city-owned and/or operated site;
- Develop and implement Pollution Control Guidelines (PCG) for each city-owned or operated site;
- Determine Industrial Permit need/status for each city-owned and/or operated site;
- Create a city-wide Stormwater Facilities Master Plan summarizing and containing each PCG;

- · Review and assess methods of waster disposals including street sweepings;
- Review and assess ways to minimize the use of potential pollutants; and
- Assess known open channel conditions as well as outfall connections to the channels.

Summary of Development/Implementation Schedule

ВМР#	PERMIT YEAR					
	YR 09-10	YR 10-11	YR 11-12	YR 12-13	YR 13-14	
	Annual employee training (PEO5, IDDE1, IDDE2, IDDE6, CRC1, CRC4, CRC5, CRC6, CRC7, PDS1, PDS5, PDS6, PDS7, PDS8, PDS9, and O&M1)					
O&M1	Topic Emphasis: Obtain training DVD's. Conduct annual training for employees.	Topic Emphasis: Review and update materials. Conduct training for new hires.	Topic Emphasis: Review and update materials. Conduct annual training.	Topic Emphasis: Review and update materials. Conduct training as necessary for new hires.	Topic Emphasis: Review and update materials. Conduct annual training.	
	Target Audience: Planning Dept.; Building Inspections; Parks Dept.; Recreations Dept.; Code Enforcement; Street Dept.; Municipal Airport; Police Dept.; Fire Dept.					
	Rationale: Training multiple department staffs puts more eyes "on the ground" for finding, reporting, and/or responding to sites where requirements are not being met.					
	Operational and Maintenance Guidelines for each city-owned and/or operated site. (PEO1, PEO2, PEO5, IDDE1, IDDE2, IDDE6, IDDE7, CRC1, CRC4, CRC5, CRC6, CRC7, PDS1, PDS5, PDS6, PDS7, PDS8, PDS9, and O&M2) Determine Industrial Permit need/status for each city-owned and/or operated site. (PEO1, PEO2,					
	IDDE2, IDDE6, IDDE7, CRC4, CRC5, CRC6, CRC7, PDS1, PDS5, PDS6, PDS7, PDS8, PDS9, and O&M2)					
O&M2	Topic Emphasis:	Topic Emphasis: Determine which departments have	Topic Emphasis: Develop O&M Guidelines for each municipal industrial	Topic Emphasis: Each site and/or operation to adopt a set of O&M Guidelines. Each		

		ccur "in-house." We are		und" for finding, reportir vant residents, businesse		
	Develop and implement of the Pollution Control Manual for City Facilities. (PEO1, PEO2, PEO5, IDDE2, IDDE4, IDDE6, IDDE7, CRC4, CRC5, CRC6, CRC7, PDS5, PDS6, PDS7, PDS8, PDS9, and O&M3)					
O&M3	Topic Emphasis: Initiate review of relevant City departments.	Topic Emphasis: Develop Pollution Control guidance for relevant City departments.	Topic Emphasis: Adopt and implement Pollution Control Guidance for each relevant department.	Topic Emphasis: Complete initial assessment for PCG adherence. Review findings with each department. Revise each department's guidance as needed.	Topic Emphasis: Conduct annual assessment to PCG. Review findings with each department. Revise each department's guidance as needed.	
	Target Audience: Planning Dept.; Building Inspections; Parks Dept.; Recreations Dept.; Code Enforcement; Street Dept.; Municipal Airport; Police Dept.; Fire Dept. Rationale: Training entire departments puts more eyes "on the ground" for finding, reporting, responding and cleaning events that occur "in-house." We are the example that we want residents, businesses, and visitors to adhere to and take notice of.					
	Disposal of Wastes PDS5, PDS6, PDS7, I	•	pings (PEO5, IDDE2, I	DDE6, IDDE7, CRC4, C	RC5, CRC6, CRC7,	
O&M4	Topic Emphasis: Maintain street sweeping program.	Topic Emphasis: Assess and evaluate program. Recommend changes as appropriate.	Topic Emphasis: Implement and evaluate changes.	Topic Emphasis: Review and evaluate program. Recommend changes or improvements as appropriate.	Topic Emphasis: Implement and evaluate any changes.	
	Target Audience: Street Department personnel and Bella Vista residents; All materials will be made available in both English and non-English languages	Target Audience: Urban homeowners; All materials will be made available in both English and non-English languages	Target Audience: Property owners and residents along paved streets with storm drains; All materials will be made available in both English and non-English languages	Target Audience: All residents and businesses receiving drinking water from the Bella Vista Village POA Water Department (a private company); All materials will be made available in both English and non-English languages	Target Audience: Residents and property owners along urban creeks and streams; All materials will be made available in both English and non-English languages	

	_	Rationale: Over- fertilizing and over- watering of landscaping and lawns increases the amounts of polluted waters into our creeks and streams.				
	Herbicides; Fertilizers (PEO1, PEO2, PEO5, PEO6, IDDE2, IDDE3, IDDE4, IDDE6, IDDE7, CRC4, CRC5, CRC6, CRC7, PDS5, PDS6, PDS7, PDS8, PDS9, and O&M5)					
O&M5	Topic Emphasis: Maintain street sweeping program.	Topic Emphasis: Review application programs for pesticides, herbicides, and fertilizers.	Topic Emphasis: Look for viable options to road salt and runway deicers.	Topic Emphasis: Review and evaluate chemical options. Recommend changes or improvements as appropriate.	Topic Emphasis: Implement and evaluate housing and waste disposal of all items. Implement any changes in practices needed.	
	Target Audience: Street, Airport, Parks, and Recreation Departments' personnel as well as Bella Vista Water Utilities personnel					
	Rationale: Clean, swept streets prevent storm drains from becoming blocked which prevents streets and yards	Rationale: Over- fertilizing and over- watering increases the amounts of polluted waters into our creeks and	Rationale: Do other options to salt and deicer existing that are less environmentally "dangerous" and	Rationale: Educate how clean streets keep sediment, nutrients, bacteria, and other pollution out of drinking	Rationale: Improper containment and disposal of wastes continue to be a source of stormwater	
	from flooding.	streams.	cheaper to?	water supplies.	pollution.	
	from flooding. Provide an assessment connections to the	ent of a minimum of 2 channels each year. (P PIP3, IDDE2, IDDE3, ID	20% of known open c Most recent previous	hannel conditions as vassessment done in 1	well as outfall 996-1998.) (PEO4,	

Get the library of chemicals and other Bella Vista Village

Topic Emphasis:

parameters found in POA Water Department pretreatment samples of past water collections.

Topic Emphasis: Have all unknown/unidentified solids collected and tested by proper personnel. If required, report solids location. Remove solids by properly trained personnel. Educate personnel on source site and/or apply existing code enforcement options.

Target Audience: City employees and contract companies for locating unmapped outfalls. Engineers, designers, contractors, builders and other construction community personnel on newly installed outfalls.

Rationale: When a discharge has been reported, knowing the upstream system from the report can make it easier to track back to locate the source of the discharge.