



- ### Presentation Goals:
- Assembling a WPP
 - Gaining Stakeholder Approval
 - Submitting the WPP for State and Federal Review
 - Developing an evaluation framework and devising a method for tracking progress
 - This session will examine materials from Chapters 12.8-12.11 of the *Handbook*;

- ### A Nine Element Watershed Protection Plan Should Include:
- Information/education component
 - Schedule for implementation
 - Milestones
 - Criteria to measure progress
 - Monitoring component
 - Financial and technical resources needed
 - Evaluation framework

- ### Assembling Watershed Protection Plan
- Stakeholders need to be involved in the process as it progresses
 - Share examples of WPPs
 - Utilize the Watershed Plan Builder

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Layout / Organization *Plum Creek WPP*

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Layout / Organization *Arroyo Colorado*

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Layout / Organization *Upper San Antonio WPP*

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Upper San Antonio WPP

Who approves your plan?

Your Stakeholders

The challenge is to generate implementation information that is accurate and acceptable to the stakeholders responsible for carrying out the recommended actions.

- ## Assembling Watershed Protection Plan
- Discuss section topics and include feedback while developing the draft
 - As major sections are developed send them out for review and comment to ensure they include what stakeholders intended (include agencies and responsible parties)
 - Utilize expertise to develop appropriate sections

- ## Gaining Stakeholder Approval
- As implementation strategies are discussed present them to the responsible parties - local governments (City Council and County Commissioner Court Meetings) and local boards and authorities, to receive comments and approval
 - Discuss feasibility, constraints, possible funding sources, and timelines

- ## Gaining Stakeholder Approval
- Discuss and include all potential opportunities for implementation that are deemed appropriate by the stakeholders and responsible parties (Partnership Building)
 - Discuss uncertainty and constraints of the strategies, such as funding shortfalls.
 - Discuss and prioritize management measures
 - Determine what could be accomplished in the short term or long term of the IP timeline

What's the role of the EPA, TCEQ, and TSSWCB?



Ensure 9 key elements are met

Assembling The Final Components Of Your WPP

- ACTION PLAN
- Evaluation Framework
- Method for Tracking Progress

Action Plans

- Summarize Key Activities To Implement WPP:
 - Actions needed or detailed tasks
 - Responsible party
 - Timeframe for implementation and O&M
 - Costs (total and annual)
 - Source of funding
 - Tracking measures
- One Approach = Utilize Matrices:
 - Implementation Matrix
 - Water Quality Target Matrix

I m p l e m e n t a t i o n	Watershed Goals Goal 1: Restore water quality to meet designated uses for fishing Objective 1: Reduce sedimentation by 20 percent								
	Tasks for 6/1/01	Respon Party	Total Costs	Funding Mechanism	Indicators	Milestones			
						Short < 1 yr	Mid < 3 yr	Long < 7 yr	Remaining
Task 1	Seek donation of conservation easements from property owners along Baron Creek	Local land trust	\$0		# acres donated	2	7	10	10
I/E Activities Task 1									
	1. Environmental workshop with property owners	Local land trust	\$3,000	Section 019 funding	# workshop held	3	3		0
	2. Develop brochures on how to donate easements				# requests for assistance	2	4		
Task 2	Purchase greenway alongside Baron Creek	County park district	\$2,000/mile	County general funds	# miles purchased	2	4	7	5
I/E Activities Task 2									
	None								
Task 3	Develop ordinance requiring a 150-ft easement for new construction in floodplain of Baron Creek	Local municipalities	\$0		# ordinances adopted	1	2	4	0

Upper San Antonio River WPP – December 2006

Table 2-1: Nine Key Elements of Proposed Management Measures

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Cover and Sources of Potential Impairment	Management Measures and Targeted Critical Area	Estimated Potential Load Reduction (t/yr)	Technical and Financial Constraints Needed for Each Measure	Education Component for Each Measure (and Other Education)	Schedule of Implementation for Each Measure	Intervenor, Monitorable Milestones for Each Measure	Indicators to Measure Progress	Monitoring Component	Responsible Entity
STORMWATER RUNOFF POINT SOURCES: Existing Load = 1,108 t/yr; Required Load Reduction = 1,078 t/yr (97%)									
Aerial land deposits (urban runoff)	land leveling here at River Walk and City Parks in riparian areas	1.9E+14 (2%)	\$100,000	sign and establish public awareness program	2007-2009	Prevent leaks observed along riparian areas	reduction in non-point runoff bacteria concentrations basin-wide	erosion basin monitoring	COCA
	land reclamation/erosion practices and devices at River Walk and selected riparian areas	\$100,000	\$100,000	rehabilitation of COCA Parks staff by Texas Parks and Wildlife	2007-2009	Prevent leaks pooling along riparian areas	reduction in runoff-related bacteria concentrations basin-wide	erosion basin monitoring	COCA
The land deposits (urban runoff)	increase all permits and enforcement of pet control ordinance	2.9E+14 (3%)	already funded, additional funds could be used to expand public awareness campaign and enforcement	public awareness program at Comstock Park, Green Valley View, South Park, SAC (Cove), and Lee Park (Bass)	2007-2009	pet owner participation, number of citations and complaints	reduction in runoff-related bacteria concentrations basin-wide	erosion basin monitoring	COCA
	expand proper Scooper program	\$100,000	expand existing program to all City Parks	signs and establish a community education with dispensers and disposal	2007-2009	pet owner participation, number of citations and complaints, increase in number of calls need per year	reduction in runoff-related bacteria concentrations basin-wide	erosion basin monitoring	COCA

Water Quality Target Matrix

Management Objective: Reduce nutrient inputs into Cane Creek by 20 percent

Indicators to Measure Progress	Target Value or Goal	Interim Targets		
		Short-term	Medium-term	Long-term
P load	44 t/yr	52 t/yr	49 t/yr	44 t/yr
# of nuisance algae blooms	0	2	1	0
transparency	5.5 m	4.1 m	4.9 m	5.5 m
frequency of taste and odor problems in water supply	0	1	1	0
hypolimnetic DO	5.0 mg/L	2.5 mg/L	4.0 mg/L	5.0 mg/L

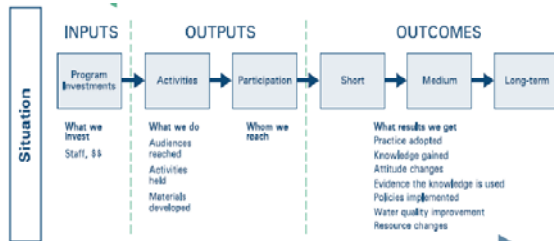
Assembling The Final Components Of Your WPP

- Action Plan
- **EVALUATION FRAMEWORK**
- Method for Tracking Progress

Evaluation Framework

- Outlines what needs to be tracked
- Reasons for evaluation framework:
 - Demonstrate affects of implemented measures in achieving water quality goals
 - Allows adaptive management / improves program efficiency
- Evaluate 3 WPP implementation components:
 1. Inputs = resources provided (time & \$)
 2. Outputs = practices installed, tasks completed
 3. Outcomes = water quality improvements, increased awareness, behavior changes

Using a Logic Model to Develop an Evaluation Framework



Evaluation Methods

- Determine what methods you will use to evaluate your program before you implement
 - Baseline Surveys
 - Focus Groups
 - Direct Measurements
 - Stakeholder Interviews

Timing of Evaluations

1. Before implementation – forms baseline
2. During implementation – provides feedback for adaptive management
3. Upon completion of project activities – evaluate final results
4. Post-implementation – observe long-term effectiveness

Assembling The Final Components Of Your WPP

- Action Plan
- Evaluation Framework
- **METHOD FOR TRACKING PROGRESS**

Method for Tracking Progress

- Identify how to track program activities (before implementing)
- Consider how to communicate updates and results to stakeholders
 - Email
 - Listserv
 - Newsletters
 - Web site

Tracking Progress

- Keep detailed records
- Matrices allow for easier tracking
- Determine whether you need to track data in excel spreadsheets, database, GIS or a combination of these.

Tracking Progress Should Include:

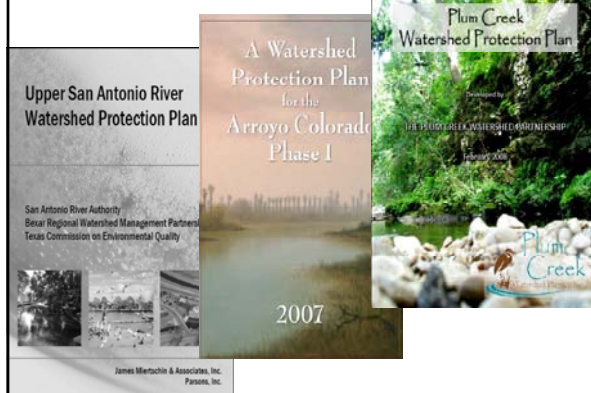
1. Process & Ownership
2. Maintenance Schedule
3. QA/QC
4. Versioning
5. Metadata

**High-quality work is key
for maintaining credibility**

Comment Period and Final Review of Draft WPP

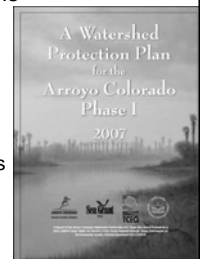
- Determine a realistic timeline for the comment period of the stakeholders and general public
- Determine what time period will be required for EPA, TCEQ, and TSSWCB to review the draft
- Announce this timeline and deadlines through your usual means of communication
- Leave enough time to incorporate comments and changes provided
- Determine how you will report the comments received

Assemble Your WPP



Final Step = Make WPP Accessible

- Watershed Protection Plan
- Reader-friendly summary versions
- Short Executive Summaries
- Frequently Asked Questions
- Distribute via:
 - Mass mailings
 - Handouts
 - Newspaper articles / press releases
 - Web site
 - Schools
- Develop slide presentation for community organizations



Final Steps of Watershed Planning Process

1. Build Partnerships
2. Characterize Watershed
3. Set Goals & Identify Solutions
4. Design Implementation Program
5. **IMPLEMENT THE PLAN**
6. **MEASURING PROGRESS & ADJUST**