

Water Quality Controls Review

Review of Current Programs, Findings and Conclusions

November 6, 2008



Council Request

(October, 2007)

"...evaluate and update the City's practices, capabilities, and available resources for review and inspection of construction-phase erosion and sedimentation controls, inspection of water quality ponds, and enforcement of maintenance requirements."



Program Aspects Reviewed

1. Code & Criteria
2. Plan Review & Permitting
3. Inspection
4. Information Tracking
5. Enforcement
6. Maintenance
7. Program Financing & Fees

Implementation Steps

Criteria Manual Revisions → Stakeholder Process Underway → Adoption (Feb. 2009)

Staffing Levels & Fees → Drainage Fee Study → Annual Budget Process

Internal Process Improvements → Implementation Underway

Code Changes → Boards & Commissions → Council Consideration

Construction Phase Erosion & Sedimentation Controls

Key Findings: Environmental Criteria Manual

- Does not emphasize or provide guidance to prevent erosion
- Contains outdated practices and scientifically unsupported design guidance
- Poorly organized and difficult to interpret
- Does not include adequate fiscal surety for sediment spill cleanup
- Inconsistent with current Federal & State requirements

Key Findings: Staffing and Process

- Erosion & Sedimentation plans often inadequate
- Fees for re-inspection after failed inspection may not cover costs
- Inadequate staff to pursue enforcement of red tags and inspection failures
- AMANDA database not configured for efficient tracking of E&S plan compliance

Environmental Criteria Manual Revisions

- Focus on preventive measures, e.g. phasing and temporary stabilization
- Update design criteria for E&S Controls



Environmental Criteria Manual Revisions

- Require posting of fiscal surety for cleanup of temporary control failures



Environmental Criteria Manual Revisions

- Require certification for erosion & sedimentation controls designers and inspectors
- Ensure criteria are consistent with State & Federal requirements

Staffing, Processes & Fees

- Evaluate re-inspection fees (currently \$50) during Drainage Utility Cost of Services study
- Increase enforcement inspectors
- Certification and additional training for WPDRD review and inspection staff
- Revise AMANDA database to provide better site tracking

Permanent Controls:

Water Quality & Flood Structures ("Ponds")

WPDRD Pond Programs

Commercial Ponds

- Landowner maintains and City inspects



WPDRD Pond Programs

Residential Ponds

- City maintains and inspects




BSZ Operating Permit Ponds

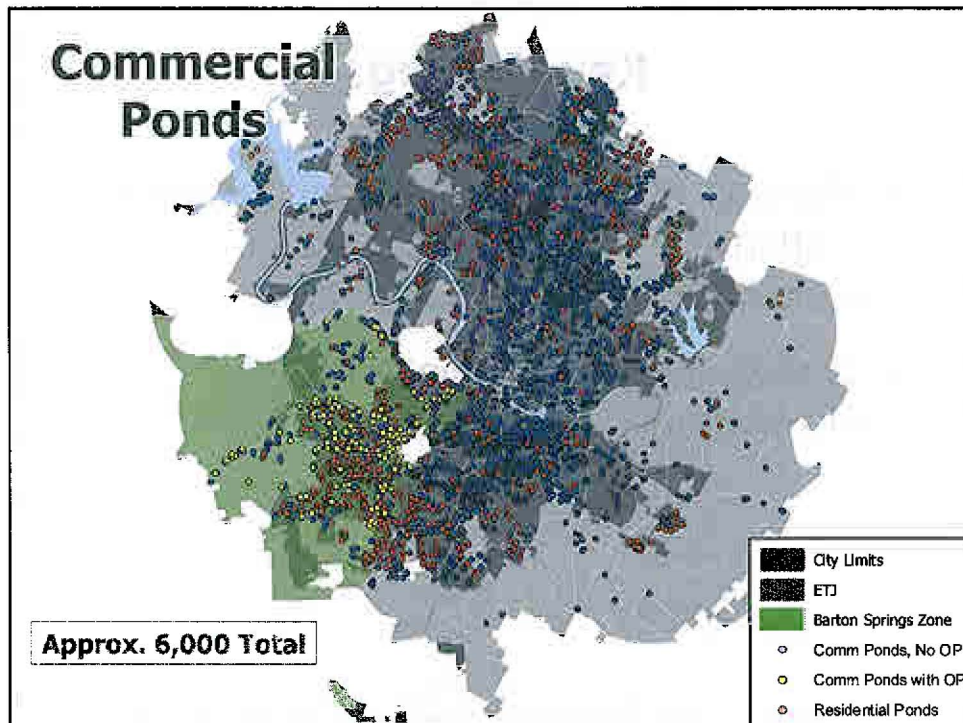
Approx. 265 Ponds

-  City Limits
-  ETJ
-  Barton Springs Zone
-  Comm Ponds with OP

Residential Ponds

Approx. 640 Ponds

-  City Limits
-  ETJ
-  Barton Springs Zone
-  Comm Ponds with OP
-  Residential Ponds



Key Findings

- Existing pond design standards are effective, up-to-date, & consistent with accepted practices
- Process needed for updating pond inventory
- Inspection programs are understaffed relative to number of ponds to be inspected

Key Findings

- Allowing Homeowner Associations (HOA) responsibility for maintenance of residential ponds is problematic
- City-owned ponds maintenance is inconsistent

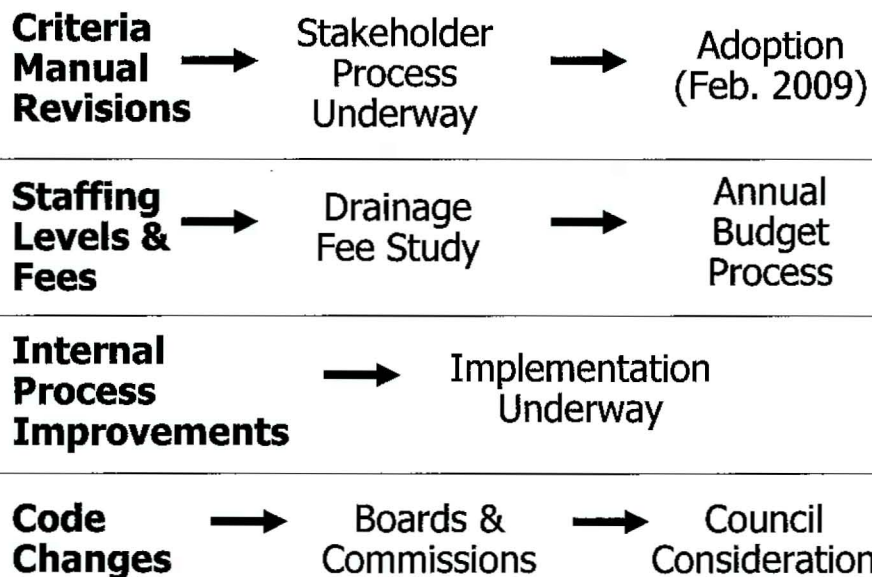
Conclusions

- Add staff to address pond inspection workload and backlog
- Complete identification of historic ponds and inclusion in database
- Develop and implement new process for adding newly constructed ponds to pond database

Conclusions

- Amend code to provide for variable inspection frequency dependent on pond performance
- Limit maintenance by HOAs, revise access criteria to address developer concerns
- Clarify O&M responsibilities for City-owned ponds

Implementation Steps



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The document also outlines the responsibilities of individuals involved in the process, including the need for transparency and accountability.

The second part of the document provides a detailed overview of the various methods used to collect and analyze data. It describes the different types of data sources, such as surveys, interviews, and focus groups, and explains how this information is used to identify trends and patterns. The document also discusses the challenges associated with data collection and analysis, such as ensuring the reliability and validity of the data, and provides recommendations for overcoming these challenges.