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Water Quality Controls Review

Review of Current Programs, Findings and Conclusions

November 6, 2008

Watershed Protection Development Review

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- Contains outdated practices and scientifically unsupported design guidance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

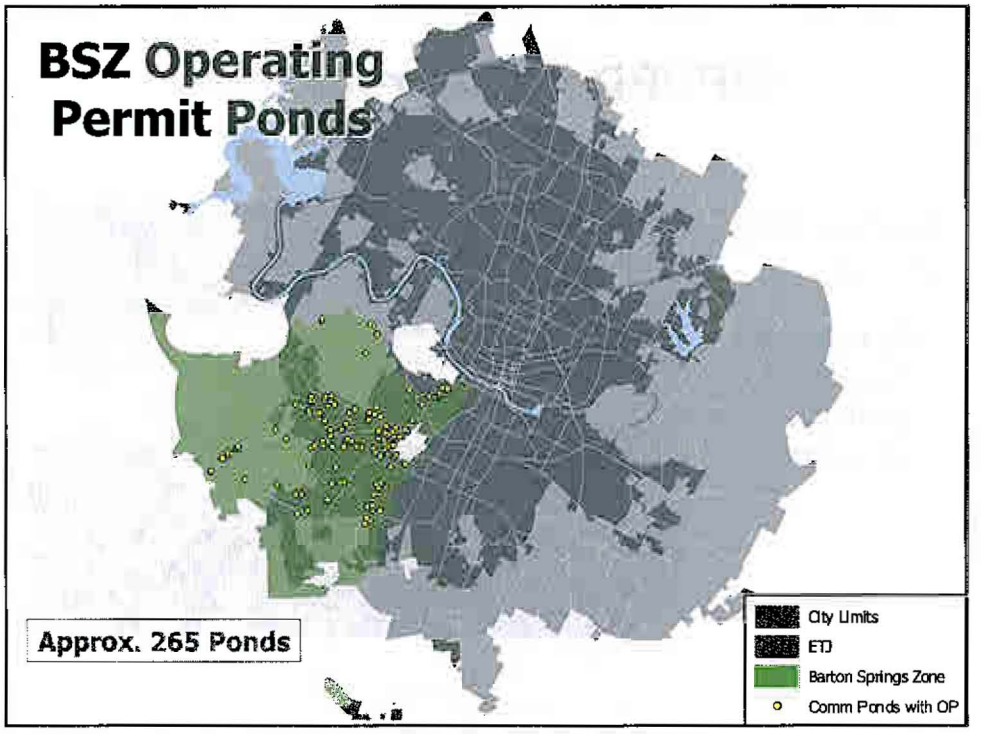
Commercial Ponds

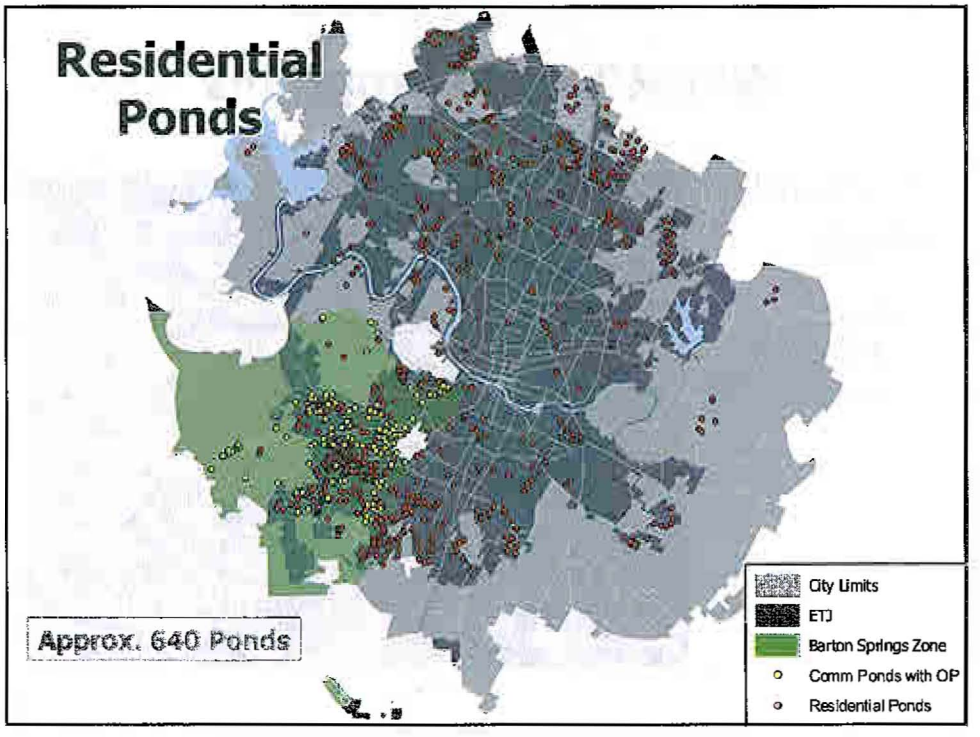
- Landowner maintains and City inspects

WPDRD Pond Programs

Residential Ponds

- City maintains <u>and</u> 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
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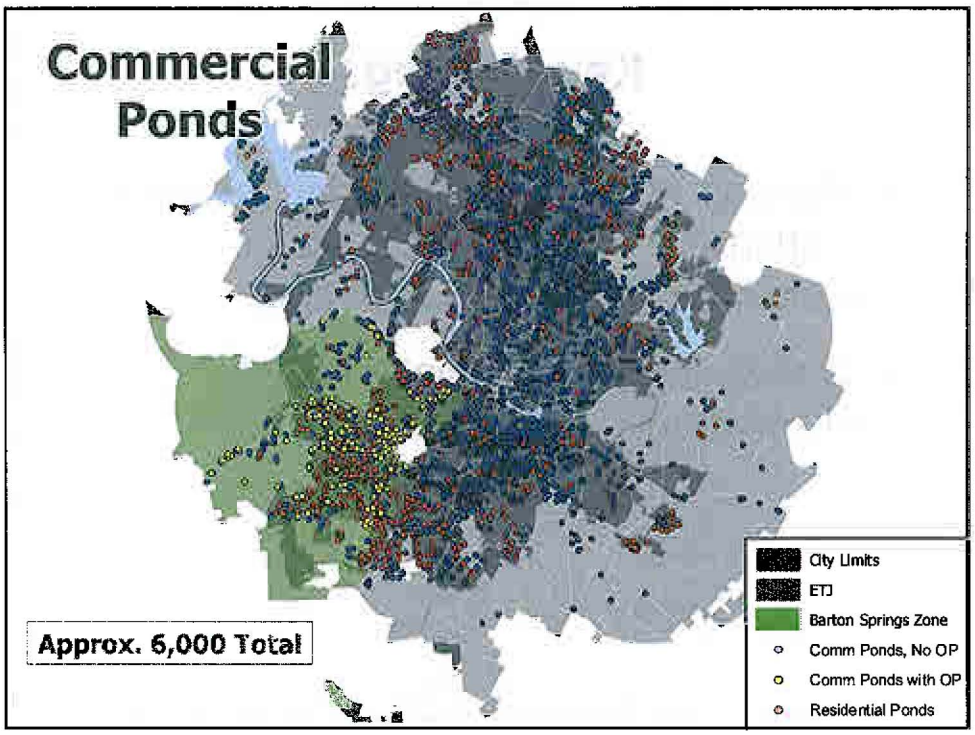
Residential Ponds



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

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