



Roswell Spring River Pond Partnership for Fishing

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GOLDEN ALGAE FISH KILLS





GOLDEN ALGAE

Over 4000 surface acres and over 180 miles of shoreline impacted.





PROJECT GENESIS

- New Mexico Bass Federation Chose Three Critical Conservation Issues
 - Youth Fishing Opportunities and Awareness
 - Golden Algae Fish Kill Mitigation in Pecos Valley
 - Spawning/Recruitment During Lake Drawdowns



WHY THE ROSWELL ZOO

- A youth fishery in need
- Golden Algae fish kills
- Controlled environment
- High education and awareness potential
- \$70K in grants and \$30K in matching labor



PLANNED IMPROVEMENTS

- Nutrient and algae control using floating wetlands, bio-filters and aquatic plants



- Bank Stabilization and Dock Repairs



2012 - 2014 PROJECT OBJECTIVES

- Restore Spring River Pond Youth Fishery (Roswell Zoo)
- Evaluate Natural Golden Algae Control Methods
- Realize Education and Awareness Opportunities
- Transfer Lessons to Partners, Academia, Wildlife Agencies and Other Conservation Organizations
- Extend Project to Lower Pecos Watershed

CHALLENGES AND RISKS

- Extreme Temperature and Weather
- Extreme Nutrient Load From Waterfowl
- Plant Predation by Turtles, Ducks, Geese, etc.
- Basic Golden Algae Science Gaps





PROJECT PARTNERS

- New Mexico Bass Federation Nation
- City of Roswell – Spring River Zoo
- Roswell High School Biology Department
- New Mexico Game and Fish Department
- Texas Parks and Wildlife Division
- Albuquerque Hawg Hunter Bass Club
- Pecos Valley Bassmasters Bass Club
- Reservoir Fisheries Habitat Partnership

SUMMARY

We are partners for the future

- Urban and youth fisheries
- Spawning platforms



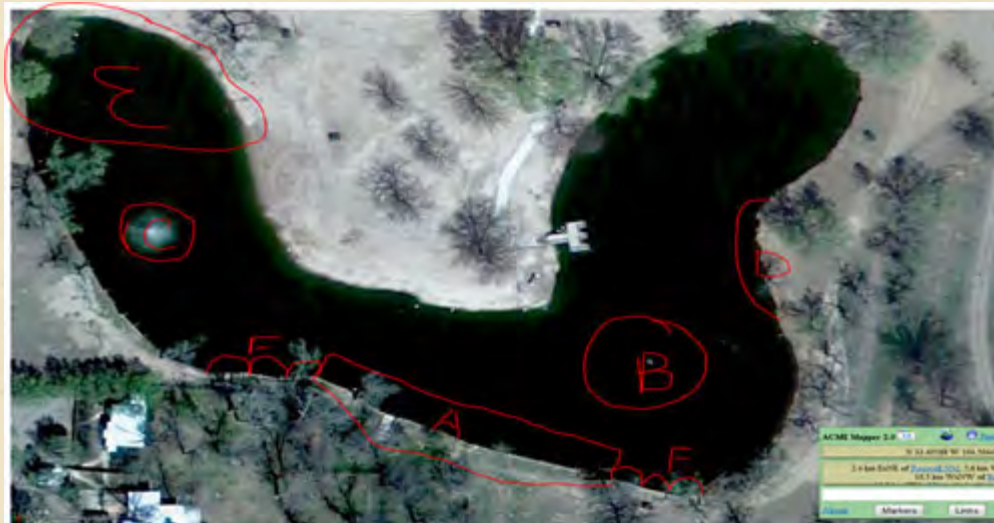
- Habitat restoration & drought recovery



BACKUP SLIDES

- Conceptual Design
- Project Location
- Texas Fish Kills
- Floating Wetland Concept

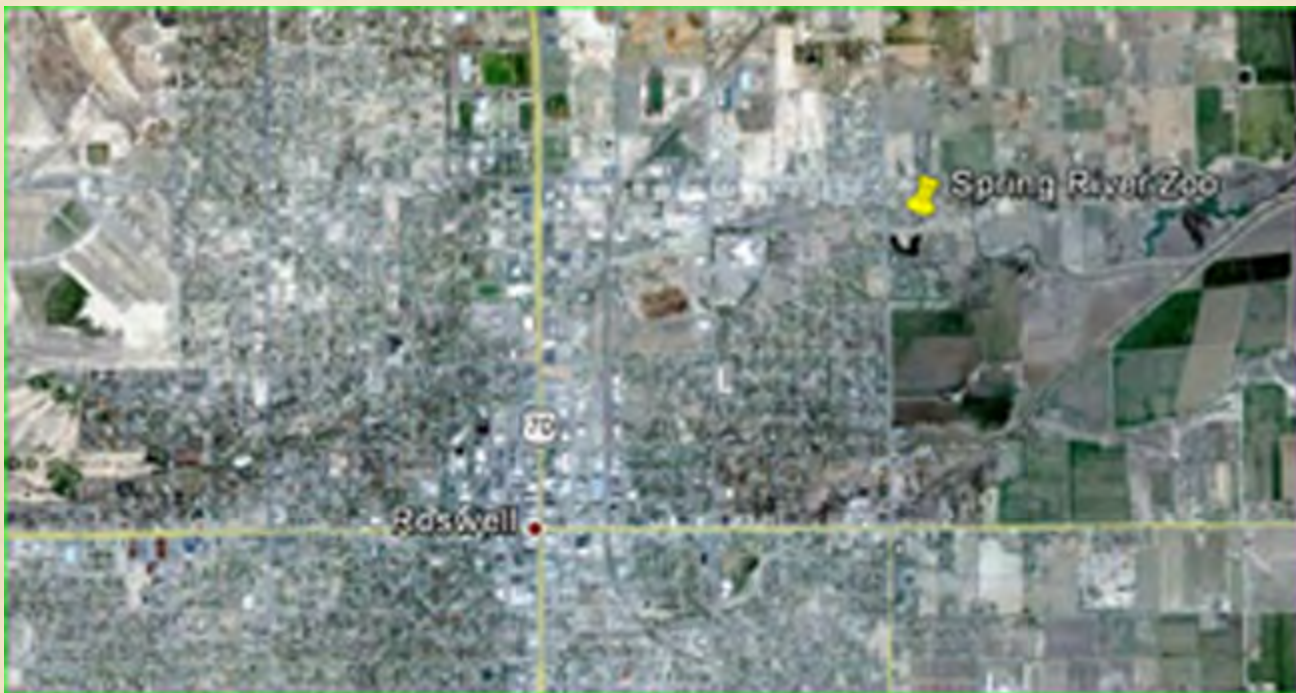
CONCEPTUAL DESIGN



- A. Floating Wetland Incorporating Waterfall Pump
- B. Bi-level Island/Aquatic Experimental Platform
- C. Stationary Aerated Aquatics Planter
- D. Shoreline Stabilization Vegetation
- E. Shallow Wetland Vegetation
- F. Bulkhead Aquatics/Habitat Experiment
- General Landscape and Grounds Improvements (signage, dock, etc.)

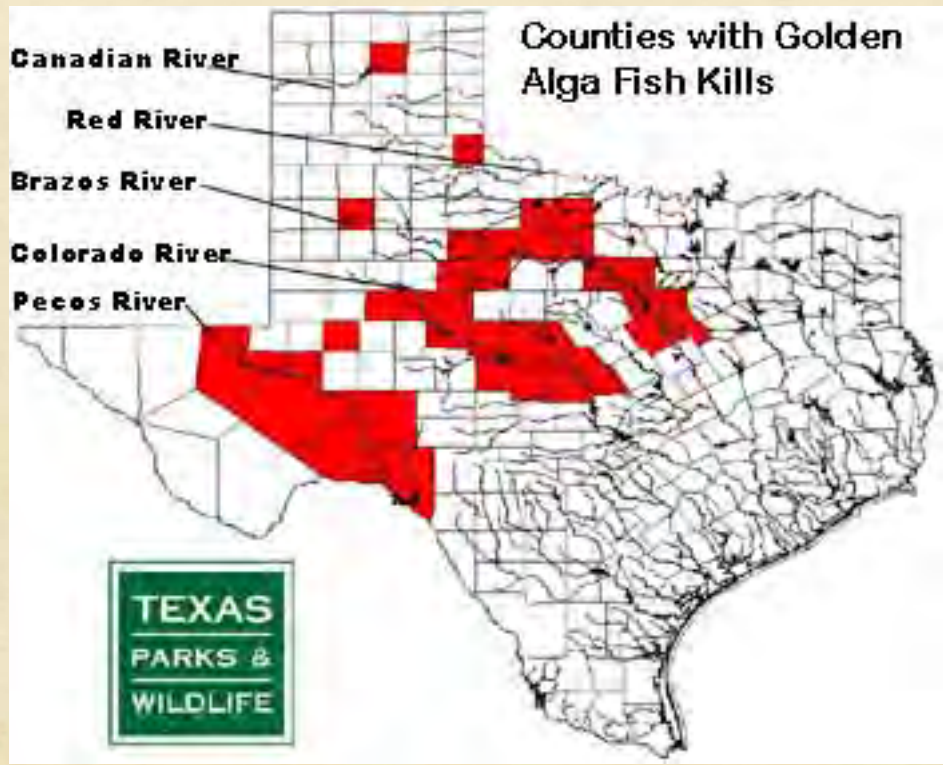


PROJECT LOCATION





TEXAS GOLDEN ALGAE



FLOATING WETLANDS



Several different designs exist

Proven nutrient uptake capabilities

Used in several zoos and parks

