

Lady Bird Lake *Arundo donax* (Giant Cane) Control

A cooperative effort
Watershed Protection
Parks and Recreation
2011

NOTE: This presentation will be expanded for the
August 17, 2011 Environmental Board meeting

Problems with giant cane

- Invasive perennial grass
- Grows 20 ft tall along rivers and lakes
- Dense "monoculture"- no other plants grow
- Displaces native plants
- Spreads easily by root-like rhizomes and small fragments
- Provides little public benefit or wildlife habitat
- Can be hiding place for transients and trash
- Increases fire danger
- Uses 3 X as much water as native vegetation



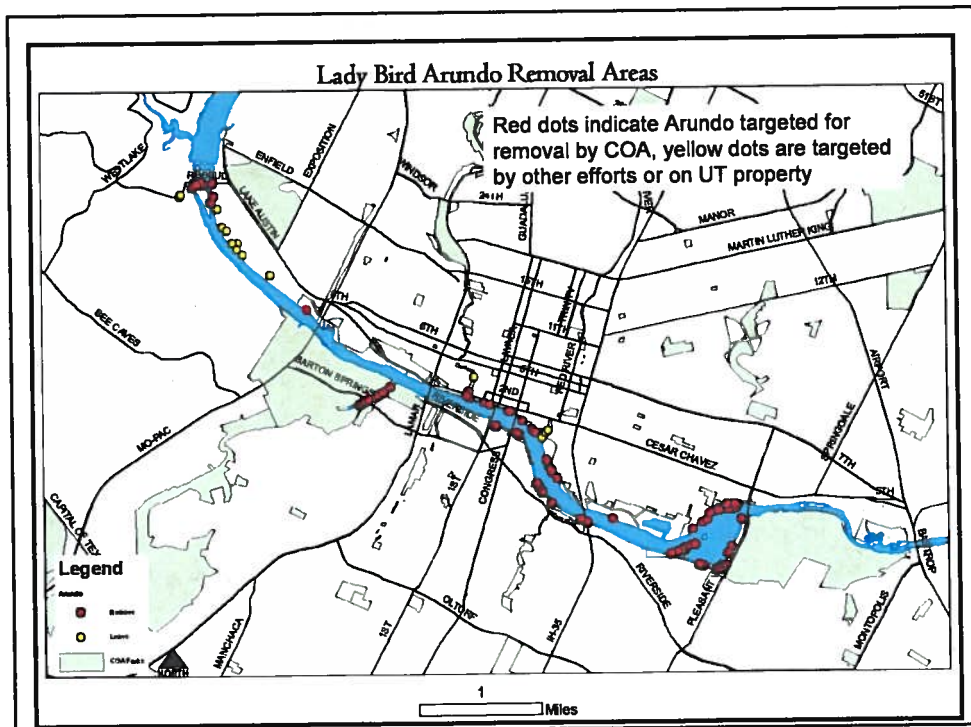
Arundo on Rio Grande

What's it like on Lady Bird Lake?

- ~ 3.4 acres
- Spread along entire 5 mile shoreline
- ~ 7900 linear feet
- Size range- single plant to 150 ft long patch



Grows between hike and bike trail and lake edge, typically on fairly steep slopes



What's been done so far?

- PARD mows some upland areas and gentle slopes
- Volunteers cut some at Redbud park
- Plants always re-grow within weeks
- Mechanical removal not feasible due to deep dense roots



What is proposed now?

Lady Bird Riparian Restoration

- WPD has CIP funding for restoration using native plants, but first, invasives need to be removed.
- First step- *Arundo* (giant cane) control using IPM plan (being developed with experts on national and state level):
 - Cut plants to decrease biomass
 - Apply herbicide 4-6 weeks later, on 3-4 ft tall plants
 - maximum control with minimal public exposure and herbicide use
 - Herbicides: Imazamox and possibly Glyphosate
 - Both labeled by EPA for safe use in/near water
 - Imazamox
 - very favorable environmental profile
 - no impact to trees
 - only herbicide on mkt w/ EPA tolerance exemption = no adverse effects shown, regardless of exposure route

Details of control efforts

- Aug 15 - Cutting begins, will take 2-3 + weeks
 - American Youthworks labor
 - WPD Field Ops disposal crews, barges, dump trucks
 - PARD coord trail/park issues- Joe Diaz & Jeff Larsen
 - Plant material goes to Hornsby Bend for composting
- Herbicide application
 - 4-6 weeks later (mid Sept-Oct) depending on re-growth
 - Professional applicator w/ air boat and large capacity equipment (high pressure, 200 ft hoses)
 - This will ensure complete coverage AND minimize time for lakewide application (approx 3 days)
 - Motor boat OK for City contractor (City Code Section 6-5-32 (C))

Public notification

- Memo to Mayor and Council before efforts begin
- Cutting- notification each day of work
 - WPD signage on either side of work zone
 - Signs are used in other WPD Field Ops lakeshore vegetation removal
- Herbicide application-
 - PARD protocol, they will coordinate:
 - 2 weeks prior, notices in kiosks and along trail, "maintenance will occur..." (trail closure signs as needed)
 - 1 week prior, exact details as to herbicide application and trail closures
 - Day of application - trails closed, signs w/ herbicide and WPD contact information, caution tape where needed- as determined by PARD
 - Herbicide will dry in 1-2 hours, area re-opened next day
- Stakeholders (Parks Foundation, Trails Foundation, KAB) are supportive of Arundo control, not briefed on details yet