

Dixon Branch Public Meeting #1

City of Dallas, Texas
July 8, 2008



MEETING AGENDA

- ▶ Introduce Project Team 7:00-7:30
- ▶ Project Overview
 - Scope
 - History & Public Involvement
 - Schedule
- ▶ Next Steps
- ▶ Break-out Groups 7:30-9:00



PROJECT TEAM

Program Manager
Steve Parker, PE, CFM



Principal-in-Charge
Alan Greer, PE



Project Manager
Than Nguyen, EIT, CFM



Project Manager
Mike Ways, PE, CFM



**Environmental
Permitting**
Steve Watters



Assistant PM
Michelle Iblings, PE



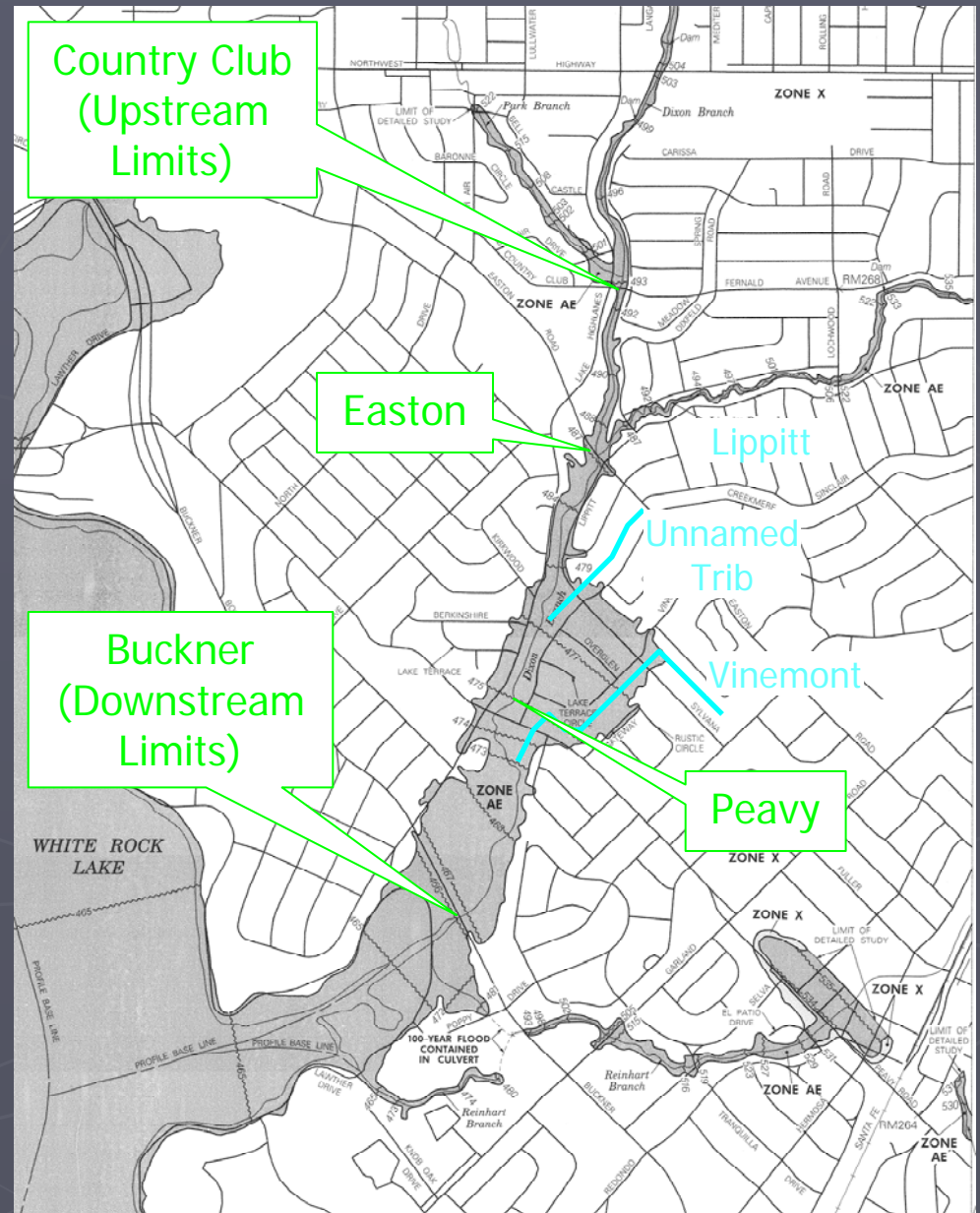
Project Engineer
Lesley Brooks, EIT



PROJECT OVERVIEW

Dixon Branch

- ▶ 1.6 mi of stream
- ▶ Watershed (7 mi²) extends to Garland
- ▶ 3 Major tribs
 - Lippitt
 - Unnamed Trib
 - Vinemont



PROJECT OVERVIEW

- ▶ Updated DFIRM 100-yr floodplain in Blue
- ▶ 241 parcels in 100-yr floodplain (green & red)
 - ~172 in previous floodplain (green only)
 - ~97 homes flood
- ▶ 37 homes reporting flooding in 3/19/06 storm (red dots)
 - ~60 homes total



Looking
Downstream
at Easton

2008/02/07 23:43





Peavy

2008/02/07 22:30



Buckner

PROJECT GOAL

Solve the street & structure flooding by providing 100-year protection, considering...

- ▶ Engineering needs
- ▶ Environmental requirements
- ▶ Funding constraints
- ▶ Public Involvement & Buy-In
- ▶ Easements – Stay within existing ROW & Easements
- ▶ Vegetation – Tree & habitat protection



PREVIOUS DIXON STUDY #1 (1984)

- ▶ References previous study in 1971
- ▶ H&H study of 9.2 mi of Dixon & tribs
 - 102 residences & 1 commercial in 100-year based on existing zoning (\$3.1 M in damages)
- ▶ Proposed 5 alternatives; recommended #2 (\$12M)
 - Alt 1 – Detention + Partial Buyout
 - Alts 2 & 3 – Detention + Channel/Bridge Widening
 - Alt 4 – Larger Channel/Bridge Widening + Culverts
 - Alt 5 – Full Buyout



PREVIOUS DIXON STUDY #2 (1993)

- ▶ Alternatives Considered
 - Detention, Diversion, & Buy Out considered infeasible
 - Options 1 & 2 – Pump/Sump & Floodwall System
 - Option 3 – Full channel improvements from Buckner to Easton
- ▶ Public Involvement
 - Resident Survey & Questionnaire
 - Public Meetings – Resident concern over loss of trees, habitat, parks, open space, etc.
- ▶ Recommended Option 3; channel improvements never constructed



What has happened since?

- ▶ Various improvements along Vinemont tributary
- ▶ New environmental regulations
- ▶ Changes in various City codes and ordinances
- ▶ Development in the watershed
- ▶ Flooding
 - 1995 – Street Flooding
 - March 19, 2006 – 50-100-year storm
- ▶ 2008 Contract to Freese and Nichols, Inc.



What has been done in 2008?

- ▶ Data Collection
 - Review of previous studies & flooding comments
 - Rainfall Analysis
- ▶ Existing Conditions Site Assessment
 - Survey
 - Environmental
- ▶ H&H
 - Update previous models with current watershed conditions

▶ Public Meeting #1



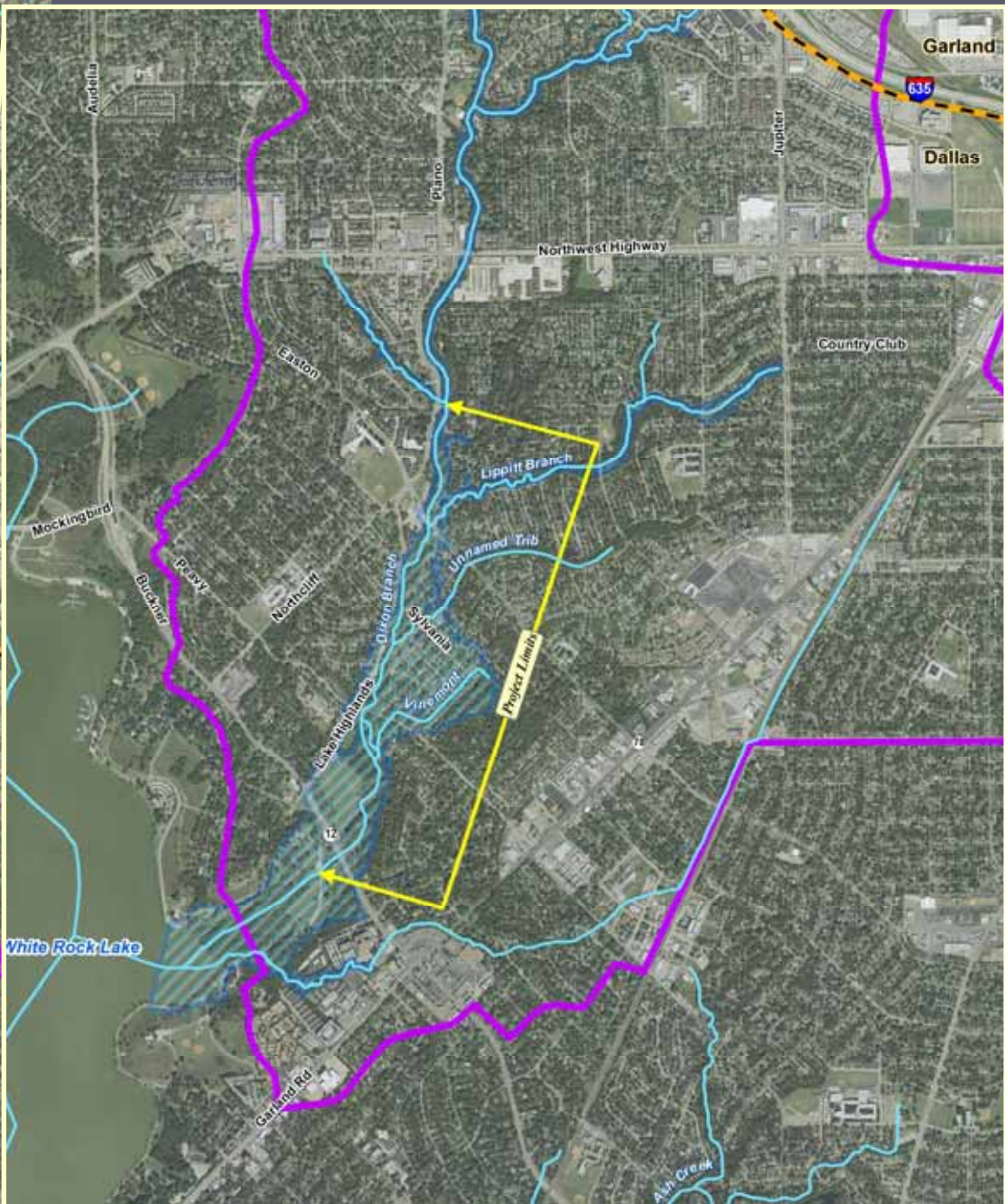
POTENTIAL ALTERNATIVES

Alternative	Complete Engineering Solution?	Environmental Impact	Relative Cost	Public Opinion
Detention	No	Low	Moderate	?
Diversion	Yes	Low	High	?
Channel Improvements	Yes	High	Moderate	?
Flood Wall	Yes	Moderate	High	?
Buy-out	Yes	Low	Moderate	?
Do Nothing	No	Low	Low	?

ALTERNATIVE PROS & CONS

- ▶ Pro – Low environmental impact for **Detention & Diversion**.
- ▶ Pro – Low relative construction cost for **Channelization**.
- ▶ Con – Minimal land available for **Detention**. Potentially high cost for land acquisition or deep detention.
- ▶ Con – High relative construction cost for **Diversion**.
- ▶ Con – High environmental impact for **Channelization**.
- ▶ Con – **Detention** alone may not solve all flooding.





What is left to do?

- ▶ EXISTING Analysis Jan 2008 – Aug 2008
 - H&H Modeling (3/19/06 storm)

- ▶ ALTERNATIVE Analysis Sept 2008 – Feb 2009
 - Preliminary Modeling, Environmental, Cost
 - 2nd Public Meeting

- ▶ FINAL Analysis Mar 2009 – Jun 2009
 - Detail Modeling for 2 Alternatives
 - 3rd Public Meeting
 - Final Report



NEXT STEPS

- ▶ Gain homeowner input and update flooding database
- ▶ Finalize Existing Analysis
- ▶ Alternative Analysis → Feasibility
- ▶ Public Meeting #2 → November 2008



DISCUSSION GROUPS

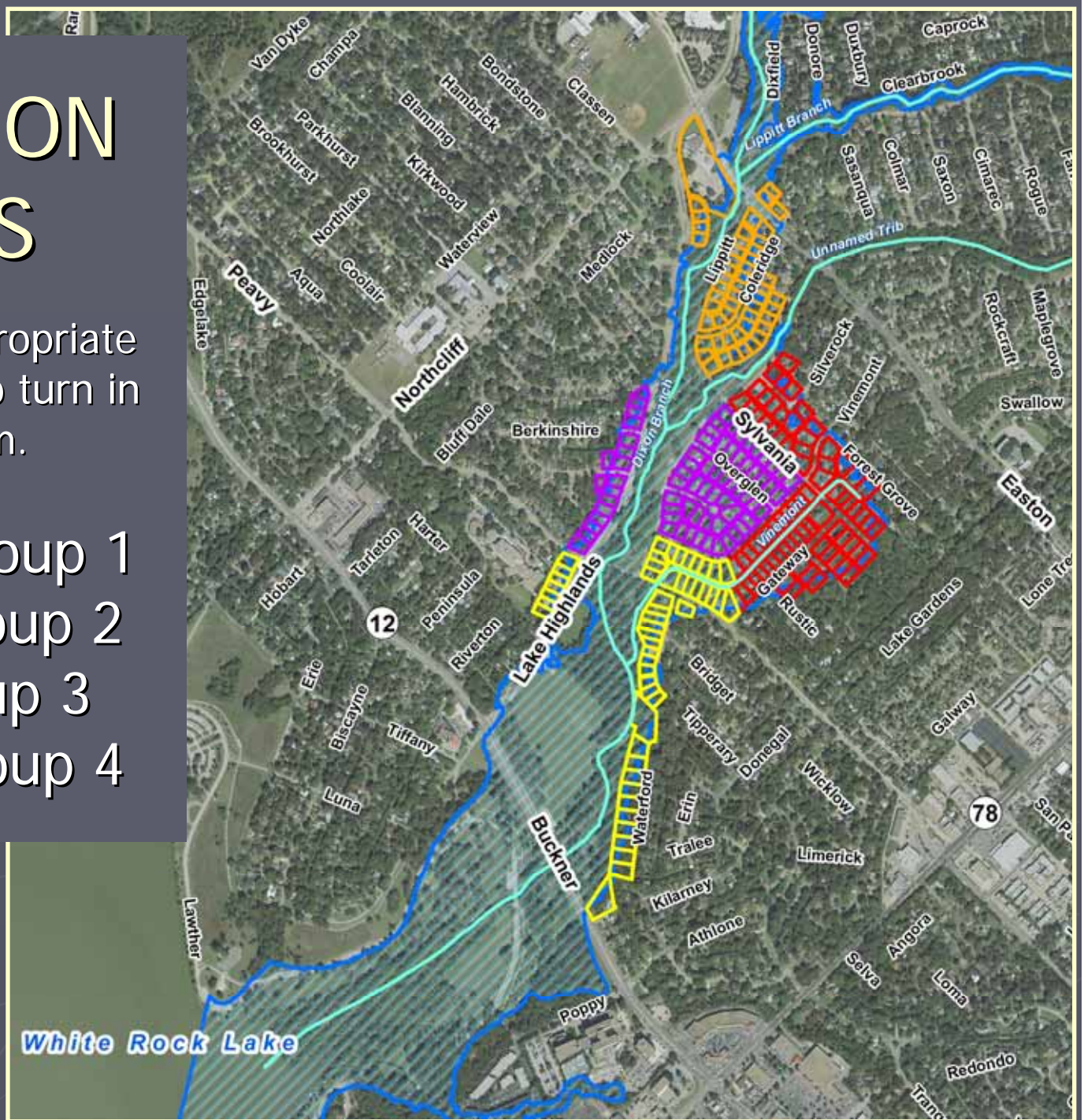
Please visit the appropriate color-coded table to turn in your Comment Form.

Orange – Group 1

Purple – Group 2

Red – Group 3

Yellow – Group 4



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