

TYLER COULEE STORM WATER MANAGEMENT

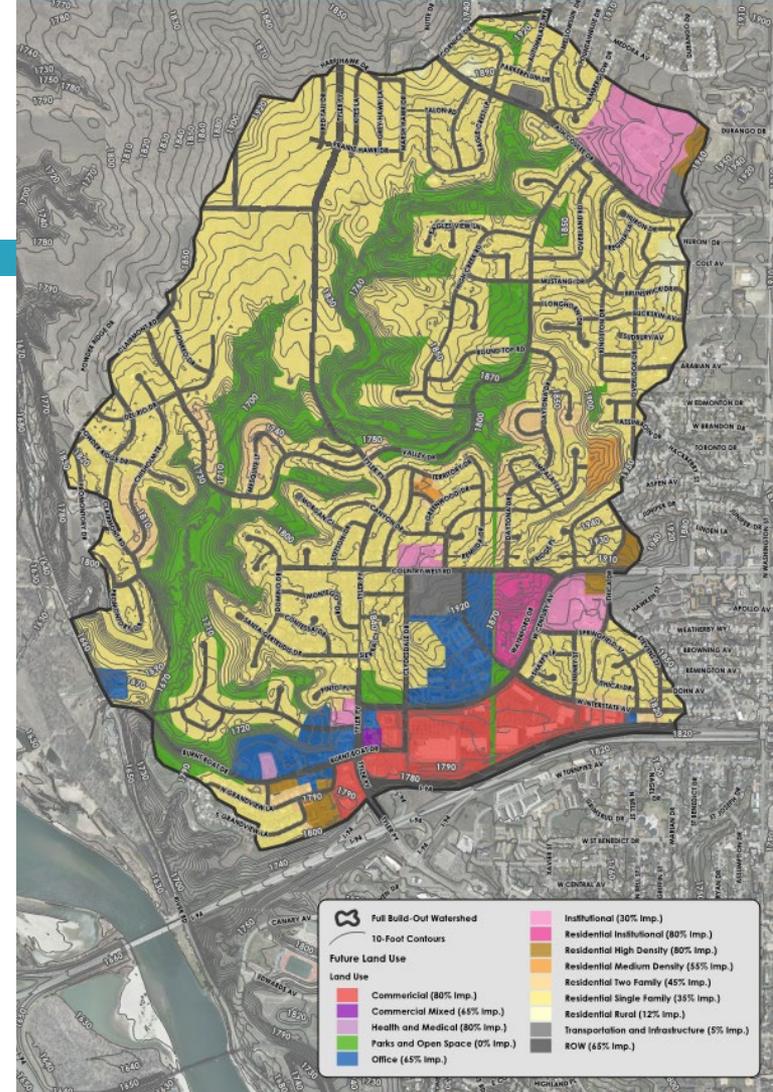
April 9, 2019

Presentation Goals

- History
- Goals
- Masterplan
Recommendations
- Next Steps

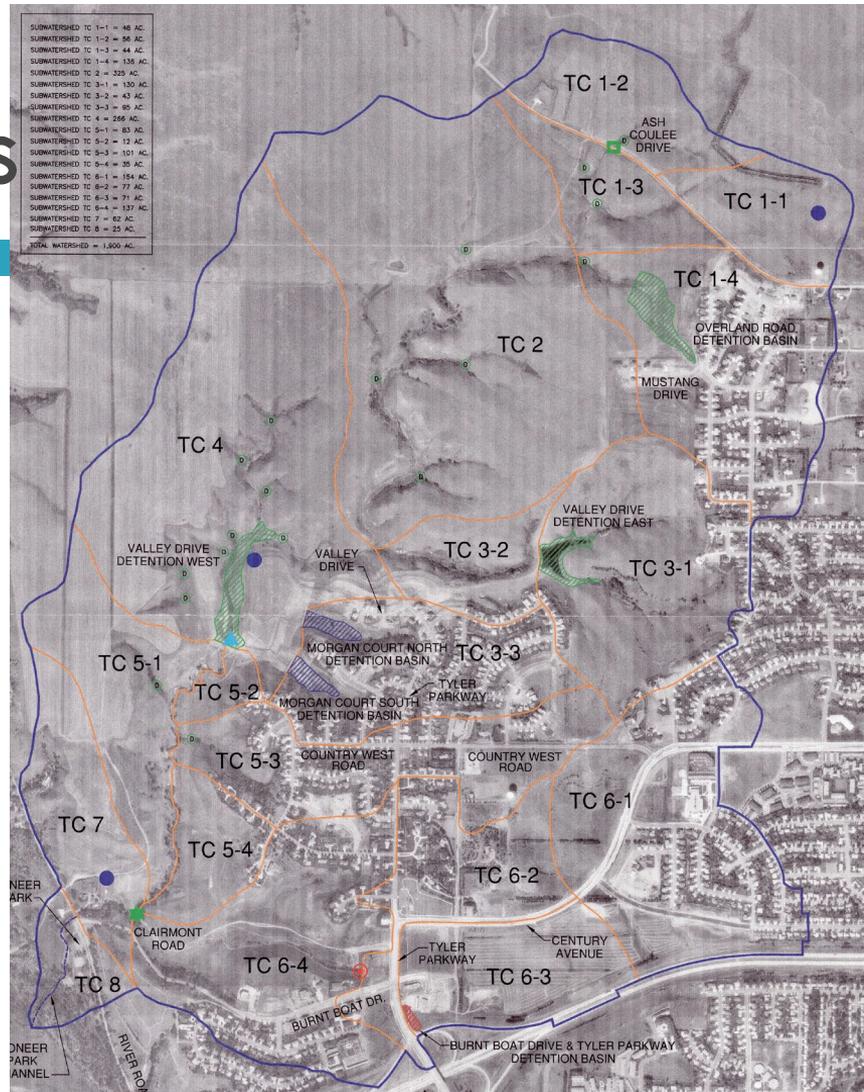
Watershed Info

- Northwest Bismarck
- ~1,870 Acres
- Largely Developed
- Drains Through Pioneer Park to Missouri River



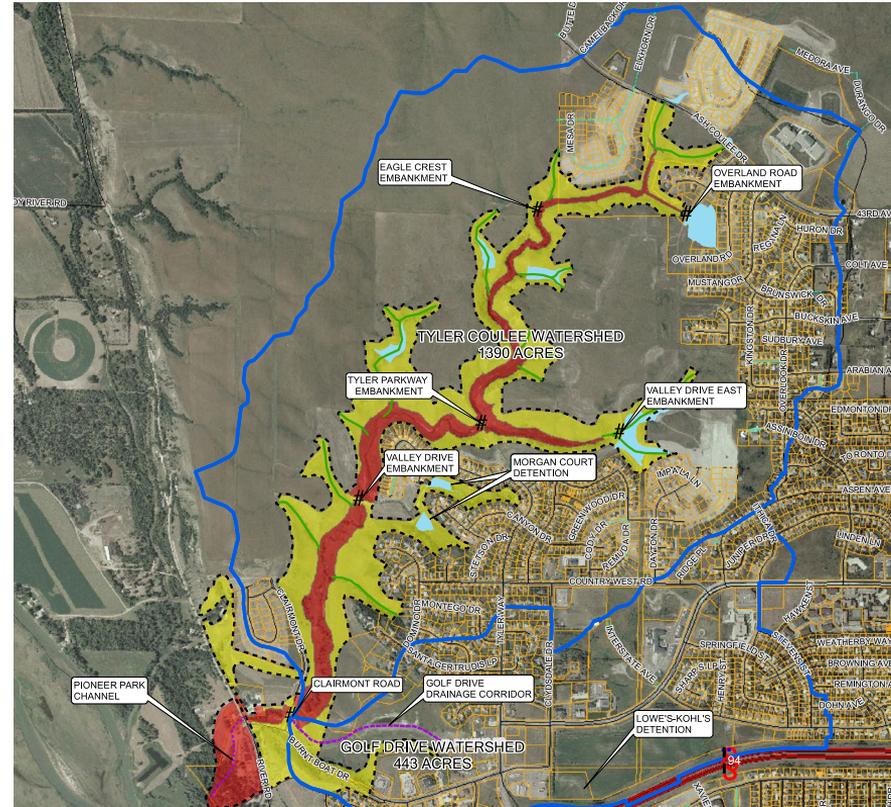
Previous Masterplans

- 2002 Recommendations
 - ▣ Improve 2 Existing Regional* Facilities
 - ▣ Construct 1 Regional* Facility
 - ▣ 20 Additional water quality ponds
 - ▣ Improvements to Pioneer Park Channel



Previous Masterplans

- 2007 Recommendations
 - ▣ Defined Local and Regional Improvements
 - ▣ Financing Mechanisms
 - ▣ 3 Regional Ponds
 - 2 Permitted High Hazard Dams
 - ▣ Development Control Line
 - ▣ Improvements to Pioneer Park Channel

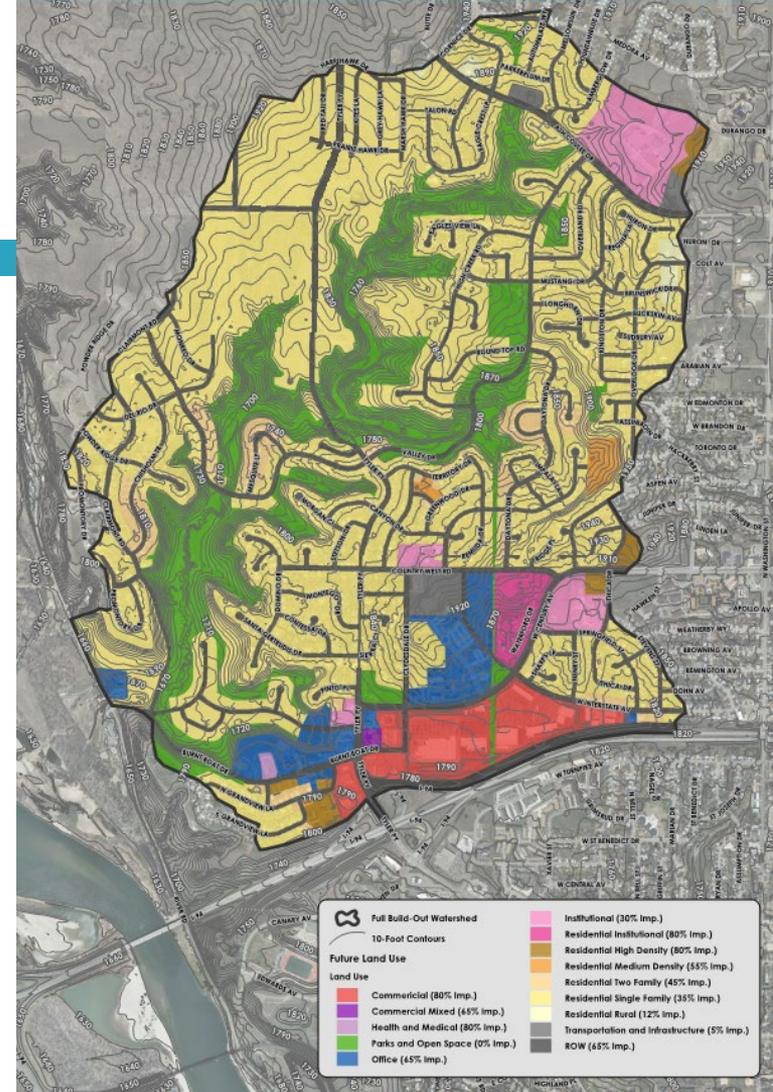


2016 Masterplan Timeline

- 2014 Began most recent update
- 2016 City Commission Approval
- Regional projects included in 5-year CIP

Goals

- Incorporate projected land uses
- Eliminate the need for two High Hazard Dams
- Provide Peak Discharge Control
- Provide Storm water quality treatment

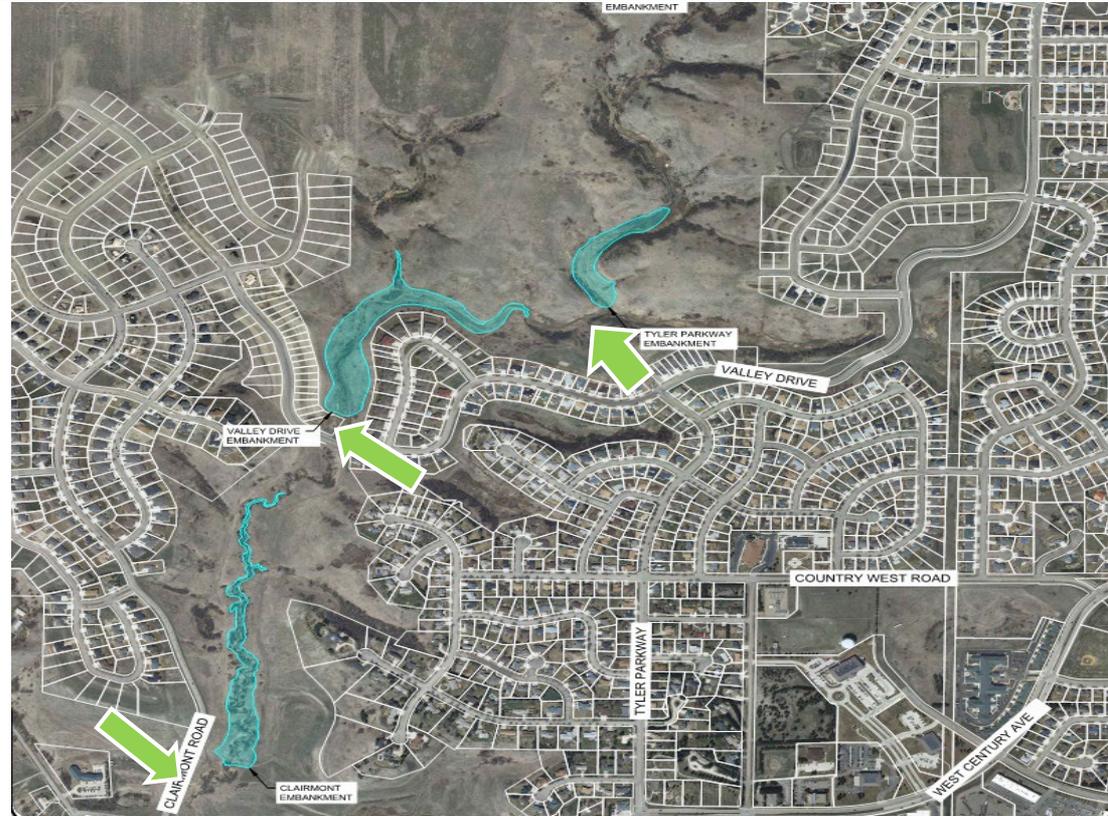


Goals

- High Hazard Dams Defined
 - ▣ Exceed 25 acre-ft of storage AND
 - ▣ Does not meet stream crossing standards
- Why not Dams?
 - ▣ Utilities Prohibited through Dam
 - ▣ Cost
 - ▣ Significant Spillway Capacity
 - ▣ Permitting/Inspections/Liability

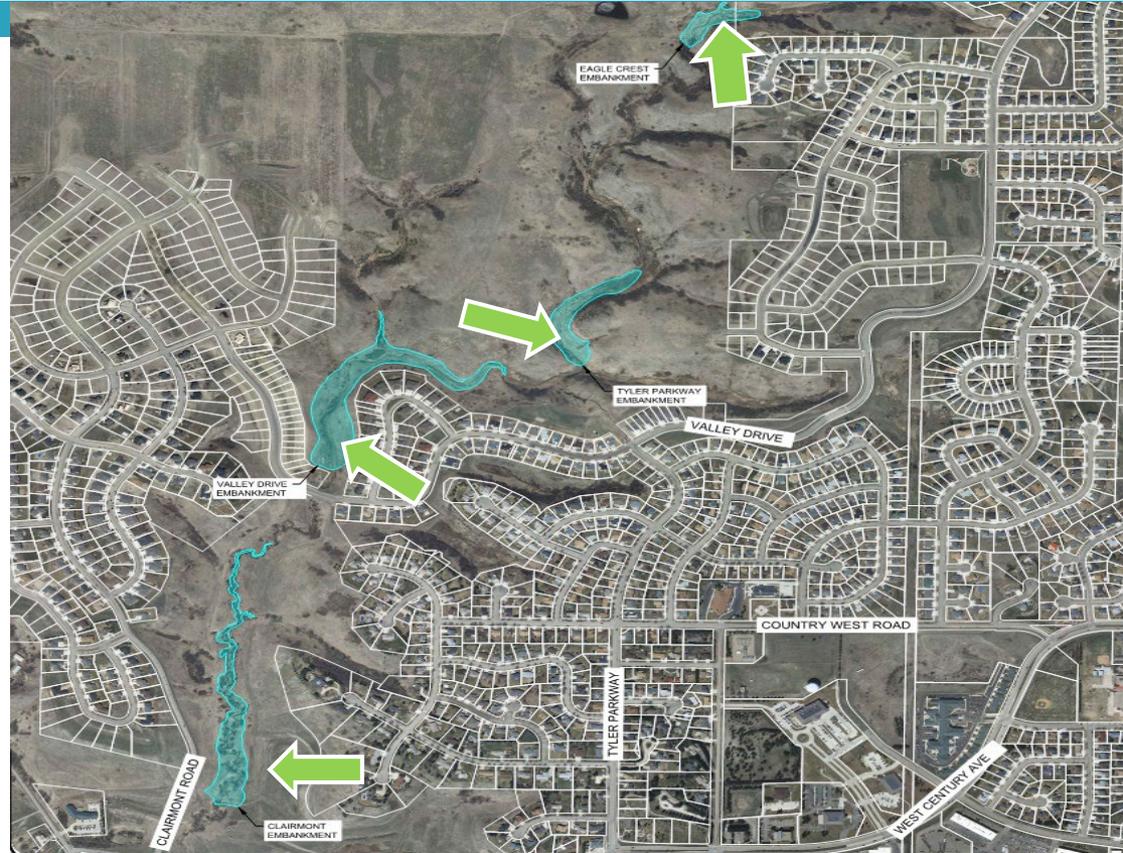
Masterplan Recommendations

- Tyler Parkway and Valley Drive Dams Replaced with Stream Crossings
- Clairmont Road higher capacity to remain as Stream Crossing



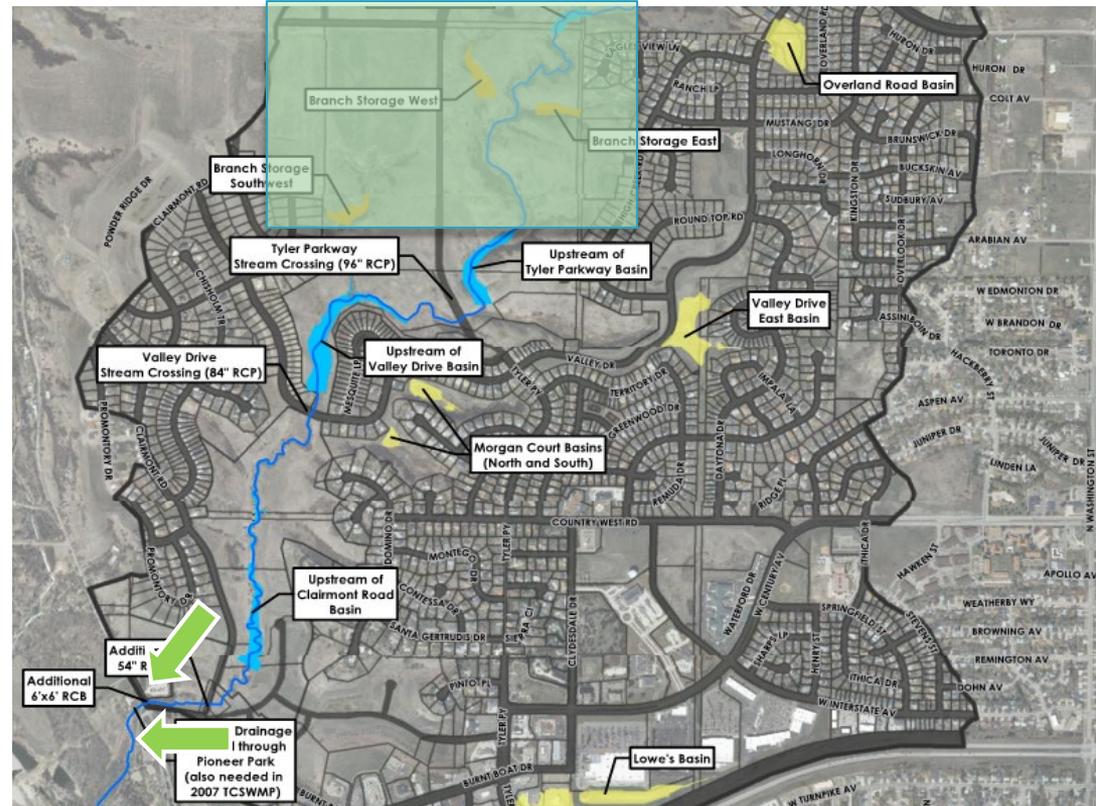
Masterplan Recommendations

- Regional Embankments
- Upstream of Roadways
 - Clairmont Road
 - Valley Drive
 - Tyler Parkway
 - Eagle Crest*



Masterplan Recommendations

- ❑ Pioneer Park Channel
- ❑ River Road
- ❑ Water Quality Basins



Summary & Next Steps

- ❑ 4 New Embankments
- ❑ 4 Crossing Improvements (3 existing locations, 1 new)
- ❑ Pioneer Park Channel
- ❑ Water Quality Basins by Developer

Summary & Next Steps

- ❑ \$4.4 million construction (includes engineering)
- ❑ Does not include land/easement acquisition
- ❑ Does not include Golf Drive improvements
- ❑ In 5 Year CIP

QUESTIONS?