City Council Briefing
February 5, 2004

Administrative Approvals for Wastewater Infrastructure in the Weston Study Area

Austin Water Utility

and

Watershed Protection and Development Review Department

Council Resolution No. 031211-53

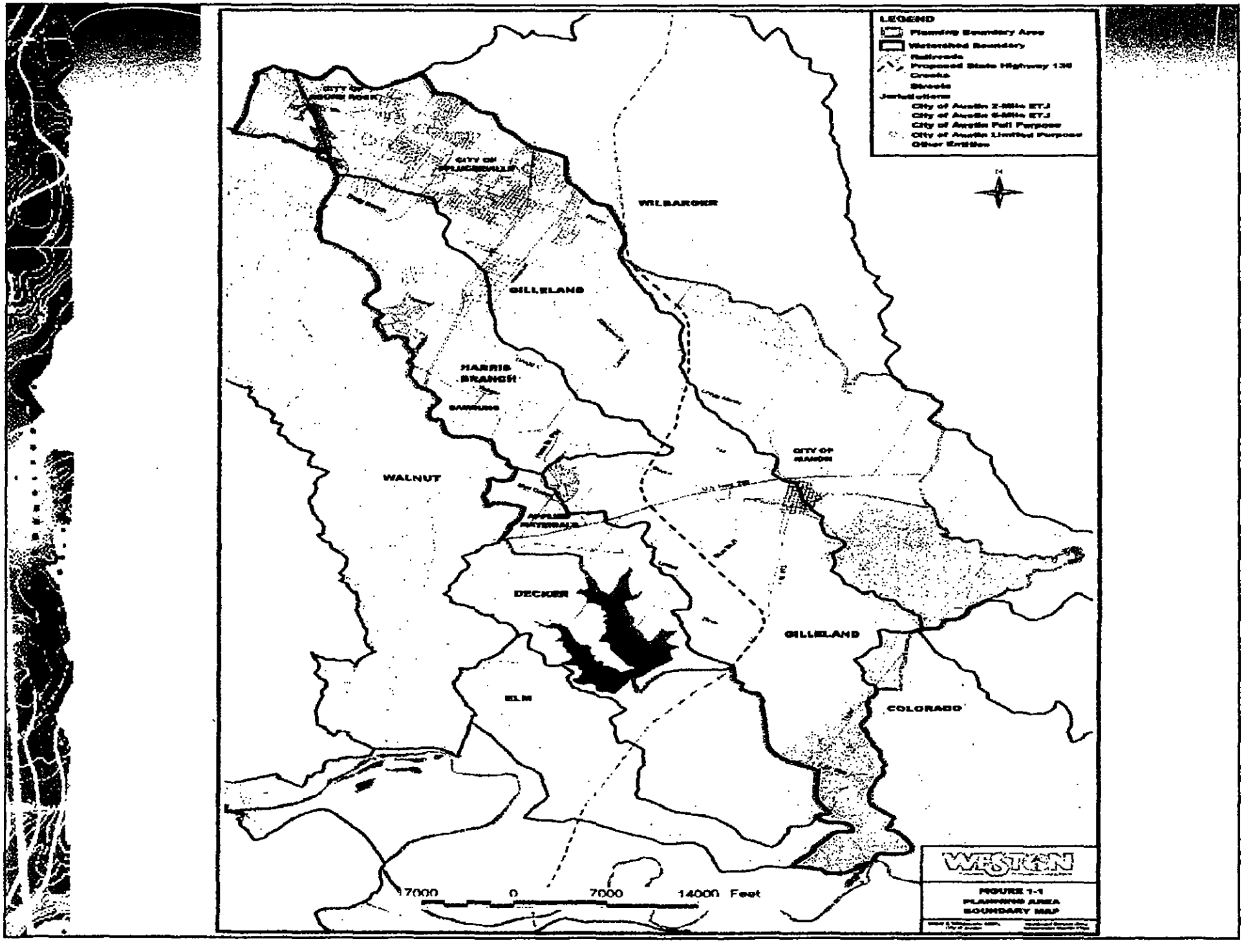
On December 11, 2003 Council directed the City Manager to present recommendations within 60 days regarding administrative approvals for wastewater infrastructure in the critical water quality zone of the Weston Study Area.

Weston Study Objective

The overall objective of the Northeast Service Area Wastewater Master Plan was to develop a long-term plan for providing wastewater service to the planning area.

Weston Study Planning Area

- The Planning Area Boundary Includes:
  - The Harris Branch and Gilleland Creek watersheds and portions of the Wilbarger and Decker Creek watersheds
  - All of the land contained in the City of Austin's 2-mile ETJ and portions of the 5-mile ETJ
  - An area encompassing approximately 45,500 acres


LEGEND
Planning Boundary Area
Watershed Boundary
Railroads
Proposed State Highway 130
Creeks
Streets
Jurisdictions
City of Austin 2-Mile ETJ
City of Austin 5-Mile ETJ
City of Austin Full Purpose
City of Austin Limited Purpose
Other Entities
N
WILBARGER
GILLELAND
HARRIS BRANCH
WALNUT
CITY OF MANOR
DECKER
GILLELAND
ELM
COLORADO
7000
0
7000
14000 Feet
WESTON
FIGURE 1-1
PLANNING AREA
BOUNDARY MAP

Scope of Weston Study

- Data Collection and Review
- Wastewater Flow Development for the years 2005, 2010, 2020, 2030 and 2040 based on two different growth scenarios
- Model Development and Analysis including phasing and cost estimates for collection system facilities

Scope of Weston Study (cont.)

- Wastewater Treatment Plant Evaluation including:
  - Alternative site selection
  - Treatment process options
  - Preliminary site layouts
  - Plant phasing
  - Cost estimates

Weston Study Recommendations

- Completed in November 2000
- Recommended a new Northeast Regional Wastewater Treatment Plant and wastewater collection system
- Proposed two alternative collector alignments:
  - Inside the Critical Water Quality Zone
  - Outside the Critical Water Quality Zone
- Projected significant cost savings if lines could be constructed in the Critical Water Quality Zone

Weston Study
Implementation Considerations

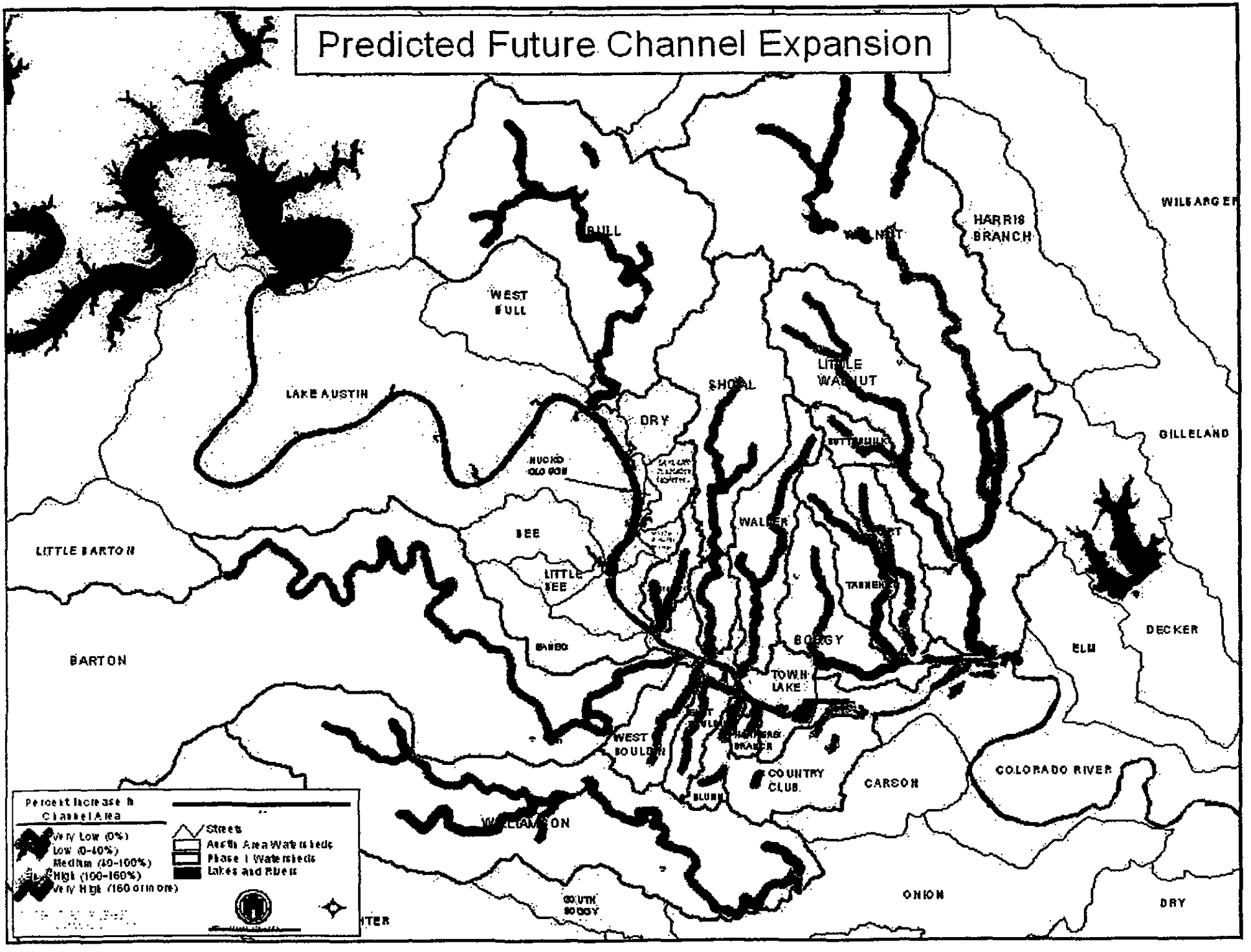
- Development in the Desired Development Zone is limited by a lack of wastewater infrastructure
- Many areas along the waterways within the Northeast Service Area have been disturbed by agricultural uses
- The Weston Study projected a $12M cost savings if wastewater lines could be constructed in the Critical Water Quality Zone
- An environmental variance request requires a large engineering investment with an uncertain result

Shared Community Goals

- **Reduce Permit Process Time and Cost**
  - Reduced time for approval and permitting of wastewater infrastructure in the Desired Development Zone
- **Reduce Construction and Maintenance Costs**
  - Reduced cost to construct wastewater infrastructure in the Desired Development Zone
  - Reduced future maintenance costs for drainage and wastewater infrastructure
- **Promote creek restoration and public access**

New Information

- Watershed Protection Master Plan (June 2001)
- Channel widening is a major concern
- Protection of channel integrity and prevention of property damage resulting from erosion


Predicted Future Channel Expansion
WILBARGER
HARRIS BRANCH
BULL
WEST BULL
LAKE AUSTIN
SHOAL
LITTLE WALNUT
DRY
GILLELAND
WALLER
LITTLE BARTON
BEE
LITTLE BEE
DECKER
BARTON
BOGGY
ELM
TOWN LAKE
WEST BOULDER
COUNTRY CLUB
CARSON
COLORADO RIVER
ONION
DRY
Percent Increase in Channel Area
Very Low (0%)
Low (0-40%)
Medium (40-100%)
High (100-160%)
Very High (160 or more)
Streets
Austin Area Watersheds
Phase I Watersheds
Lakes and Rivers

Objective

- To determine the best way to reduce the time and expense for permitting, construction and maintenance of wastewater infrastructure in the Desired Development Zone, while
  - Minimizing the future risk to the City's wastewater and drainage infrastructure
  - Providing opportunities for restoration and public access
  - Minimizing long-term operation and maintenance costs

Recommendations

- Administrative variances
  - Administrative approval of wastewater lines in the Desired Development Zone under certain conditions
- Streamlined variance process
  - Current variance consideration process without requiring a complete site plan application in the Desired Development Zone under certain conditions

Critical Water Quality Zone Variance Scenarios

Scenario 1

- Wastewater line proposed within agricultural area outside of the predicted erosion hazard zone

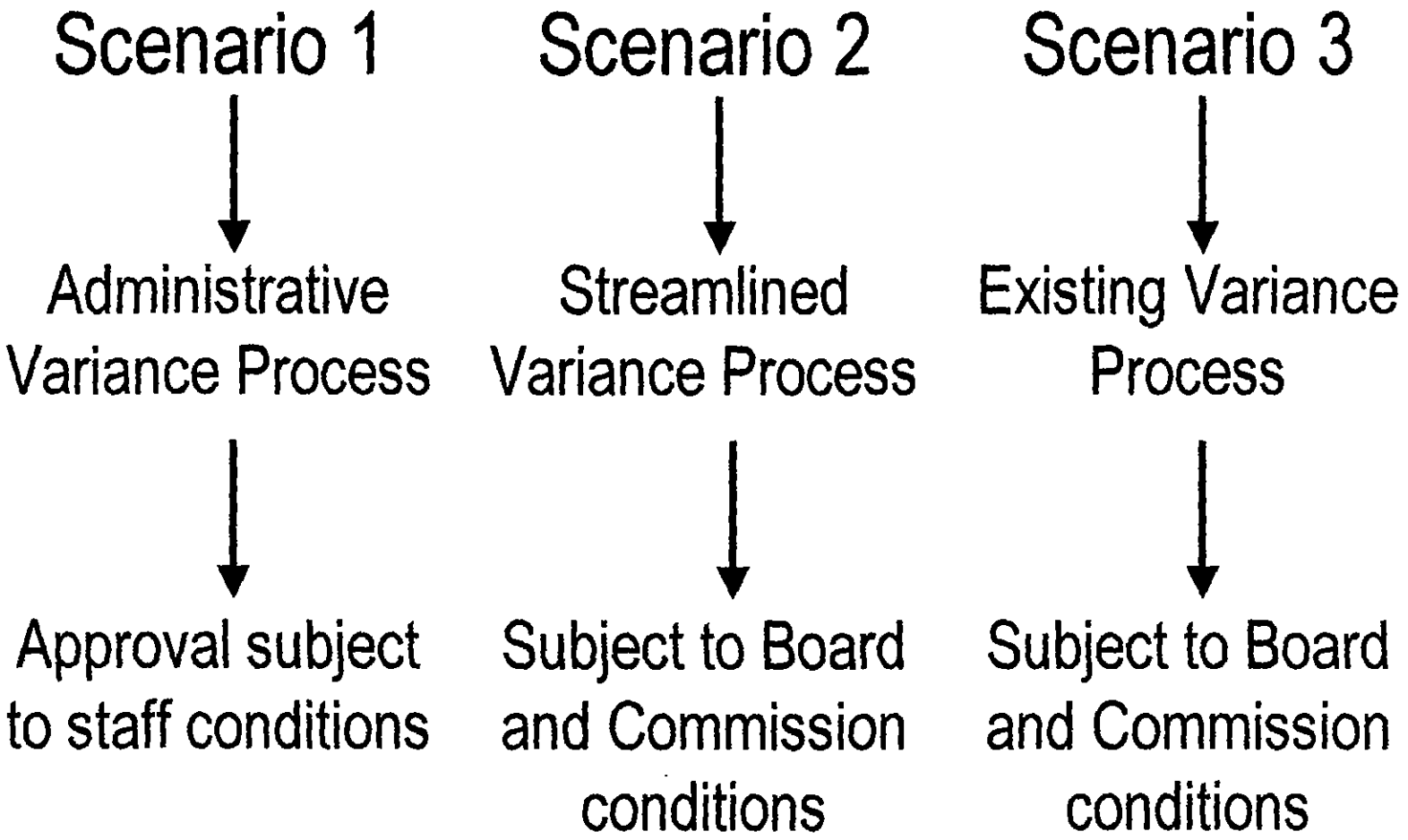
Scenario 2

- Wastewater line proposed within transitional area outside of predicted erosion hazard zone

Scenario 3

- Wastewater line proposed within a riparian woodland area and/or within the predicted erosion hazard zone

Apply Variance Process Specific to Project Conditions



Variance Mitigation Considerations

- The lines should be located outside of the predicted "Erosion Hazard Zone"
- The project should provide for native revegetation and reforestation of easement area
- The project should provide opportunities for a permanent undisturbed state and public access

Benefits – Reduce Construction and Maintenance Costs

- The ability to locate lines closer to creeks will significantly reduce construction costs
- Erosion setbacks will significantly reduce future infrastructure maintenance costs

Benefits – Promote Creek Reforestation and public access

- Variance conditions will serve to restore previously disturbed riparian areas
- Opportunities will be provided for public access to creek corridors

Draft Code Amendment Schedule

February 6-20	Interdepartmental review and
February 23-27	Drafting of Code Amendments
March 3	Environmental Board
March 3-16	Planning Commission Codes and Ordinances Subcommittee
March 16	Zoning and Platting Commission
March 23	Planning Commission
March 25	City Council 1st Reading
April 1	City Council 2nd/3rd Reading