The Lake Worth Greenprint

(working title)

Lake Worth Regional Coordinating Committee Meeting

February 20, 2014

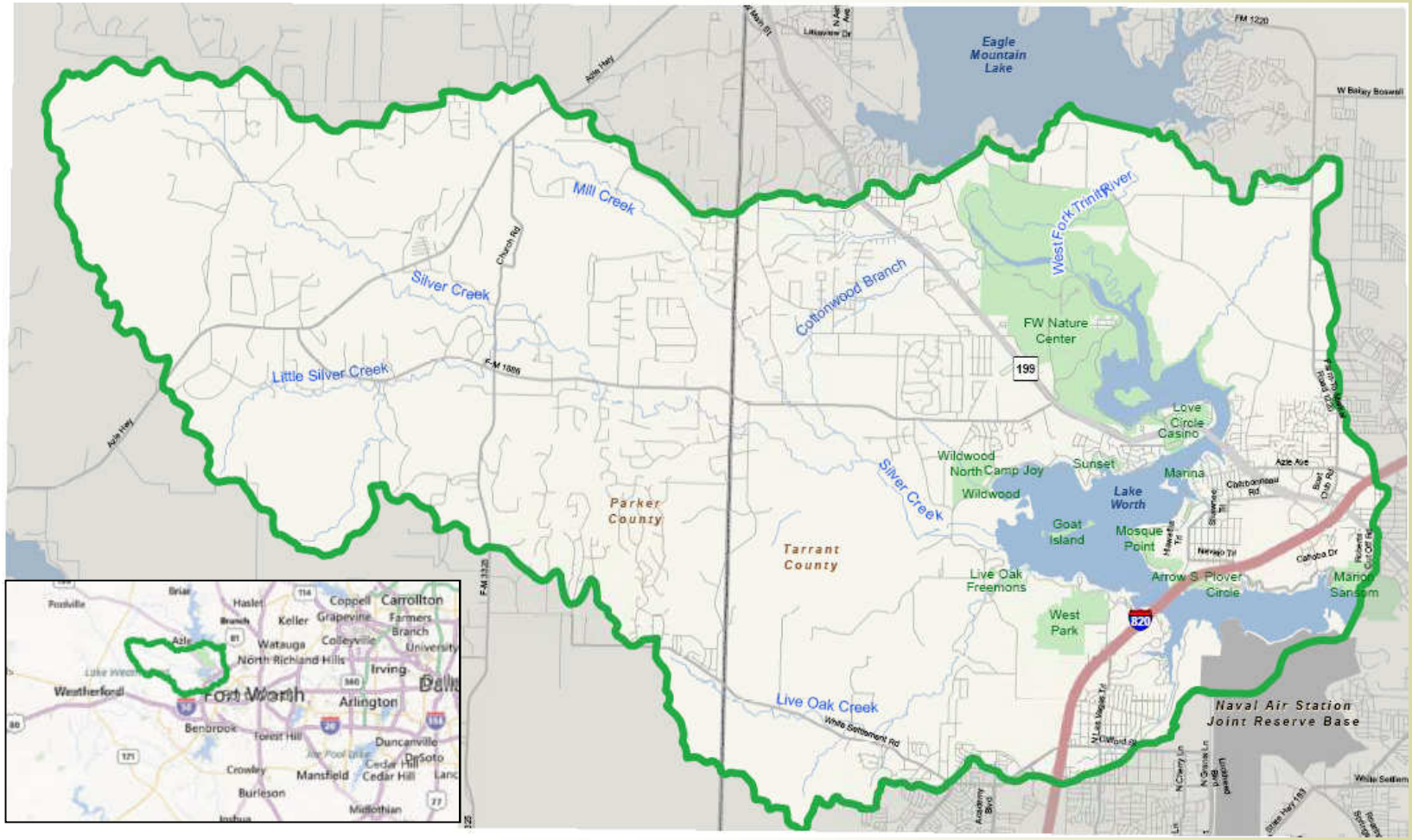
THE TRUST for PUBLIC LAND
CONSERVING LAND FOR PEOPLE

North Central Texas Council of Governments

Presentation Items

- Project background
- Water quality maps and discussion
- Recreation maps and discussion
- Next steps
- Questions/comments?

The Lake Worth Greenprint Study Area



The Lake Worth Greenprint

Objectives

1. **Develop a** long-term vision for a Lake Worth open space network**, and involve stakeholders in the decision-making process.**
2. Build upon plans **already complete or underway, e.g. trail alignment study for Lake Worth, Lake Worth Vision Plan, and the Lake Worth CIIP.**
3. Identify lands most important **for lake water quality, as well as other related community driven open space/conservation goals.**
4. **Help the city and stakeholders** evaluate the relative importance of undeveloped land **in the watershed.**
5. **Evaluate** tools that can be used to protect Lake Worth's water quality**.**
6. **Provide education about** voluntary conservation easements **(CEs) and their tax advantages to potential partners to make CE opportunities more widely understood and employed where appropriate.**

Greenprinting Process

Current Conditions Analysis

Goal Setting & Public Engagement

Economic Benefit Study

GIS Data Collection & Mapping

Conservation Finance Feasibility Assessment

Level of Service Analysis

Action Planning / Recommendations

Greenprint Mapping Analysis

- Provides a systematic approach to identify lands that offer the best opportunities for water quality protection and recreation access.
- Uses Geographic Information Systems (GIS) to inform long-term strategies for land stewardship.
- Translates regional values into objective metrics.
- Reflects community's vision and unique watershed resources.
- Offers a unique blend of science and preference.

Lake Worth Greenprint - Mapping Goals

Derived from Greenprint Interviews, Greenprint Polling, and Lake Worth Vision Plan

- **Protect Water Quality and Quantity**
  - High Priority Water Quality Zones
  - Stewardship Opportunities

- **Provide Recreation**
  - Provide Recreation Access
  - Provide Recreational Connectivity to Lake Worth Trail

Technical Advisory Team (TAT)

Purpose:

Provide expert review and advice regarding design, data input, rationale, outcomes, and mapping

Responsibilities

- Verify the completeness and appropriateness of model criteria
- Recommend best available data sources
- Help insure that defensible science is used for all models and assumptions
- Review input data and model results for accuracy and currency

Lake Worth Greenprint
Technical Advisory Teams (TAT)

TAT 1: Protect Water Quality and Quantity

Brett McGuire – City of Lake Worth
Clair Davis – Fort Worth, Flood Plains
Eric Fladager – Fort Worth, Planning
Ranjan Muttiah – Fort Worth, Stormwater
Paul Bounds – Fort Worth, Water
Rachel Wiggins – NAS Joint Reserve Base
Tracy Michel – NCTCOG
Kyle Wright – NRCS
George Conley – Parker County
Alice Moore– Tarrant County
Mark Ernst – Tarrant Regional Water District
Tina Hendon – Tarrant Regional Water District
Bill Fox – Texas AgriLife
Ken Klaveness – Trinity Waters
Sam Adamie – Tarrant County Public Health

TAT 2: Provide Recreation

Randy Whiteman – City of Lakeside
Brett McGuire – City of Lake Worth
Clair Davis – Fort Worth, Flood Plains
Nikki Sopchak – Fort Worth, Parks & Community Services
Eric Seebock – Fort Worth, Parks & Community Services
Paul Bounds – Fort Worth, Water
Suzanne Tuttle – Fort Worth Nature Center
Rachel Wiggins – NAS Joint Reserve Base
Kyle Wright – NRCS
Tracy Michel – NCTCOG
Alice Moore– Tarrant County
Sam Adamie – Tarrant County Public Health

Protect Water Quality and Quantity

Analysis - Identify lands with greatest potential for Water Quality protection (would have the greatest negative impact if developed)

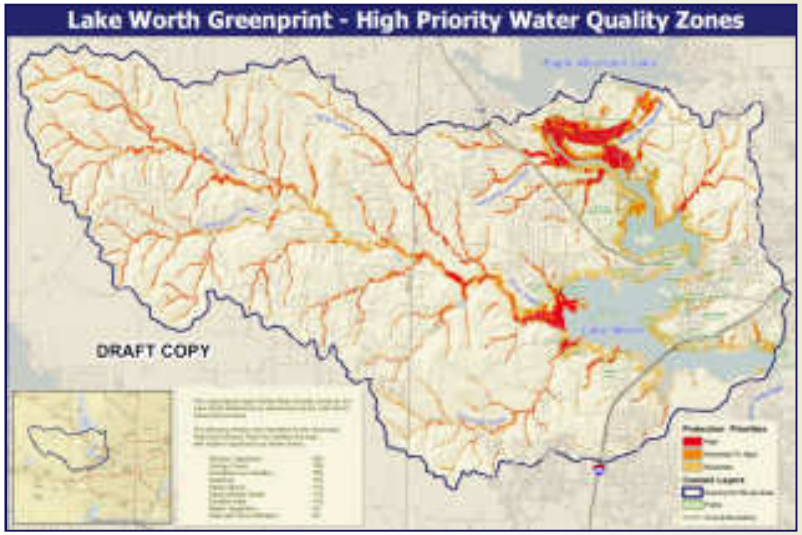
1. Identify criteria that characterize water quality protection priorities
2. Assemble data
3. Translate data into ranked criterion maps
4. Assign relative weightings that reflect Lake Worth watershed priorities.
5. Combine the building blocks into a composite conservation priority map for High Priority Water Quality Zones.
6. Identify areas that offer unique opportunities for stewardship.

Steep Stream Banks

Erodible Soils

Steep Slopes

Lake Worth Greenprint - High Priority Water Quality Zones



Relative Weighting by Function

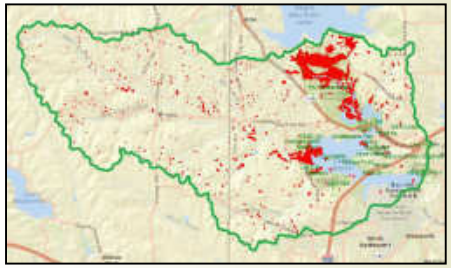
Nutrient uptake
- Riparian vegetation 20%
- Wetlands 13%

Erosion prevention
- Steep Stream banks 11%
- Erodible Soils 11%
- Steep slopes 11%

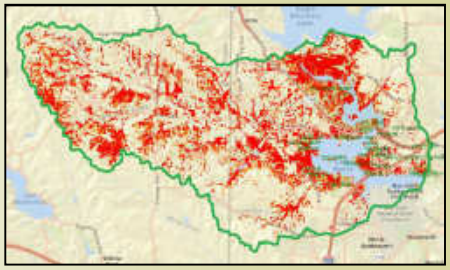
Multiple Benefits
- Canopy Cover 15%
- Native Vegetation 4%
- Floodplains and Buffers 15%

Riparian Vegetation

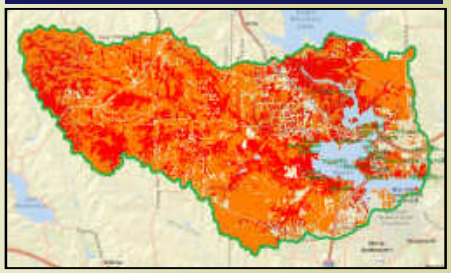
Wetlands



Canopy Cover



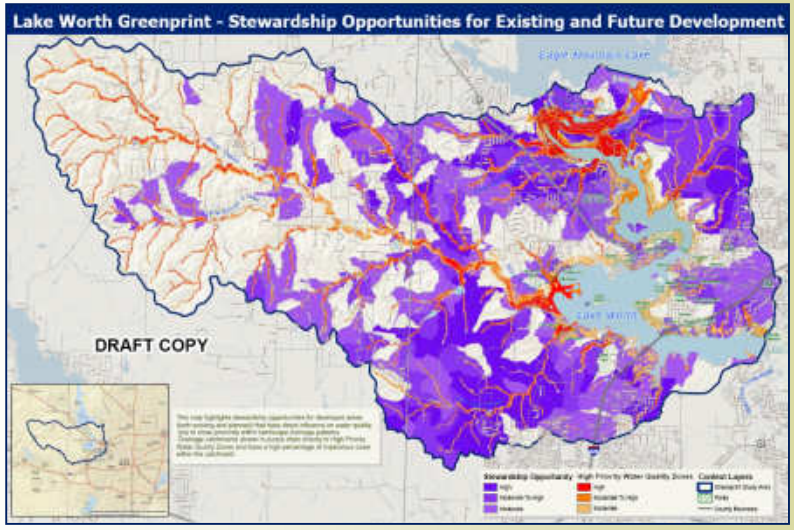
Native Vegetation



Floodplains and Buffers

Stewardship Opportunities

Stewardship Opportunities for Agricultural Land Uses



Stewardship Opportunities Existing and Future Development

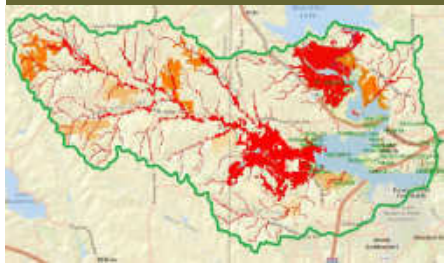
Provide Recreation Access and Connectivity

Analysis - Identify lands that enhance opportunities for recreational access and connectivity

1. Identify criteria that characterize recreational priorities
2. Assemble data
3. Translate data into ranked criterion maps
4. Assign relative weightings that reflect Lake Worth watershed priorities.
5. Combine the building blocks into a composite priority map for recreational access and connectivity.

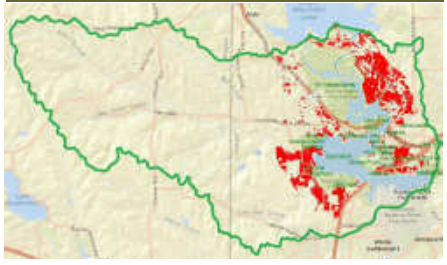
Fitness Zone Priority Neighborhoods

Wildlife Viewing



Suitable Locations for Camping

Scenic Views from Lake Worth Parks



Lake Worth Greenprint - Provide Recreation Access to Lake

Relative Weighting based on Outdoor Recreation Preferences Survey June 2013

Gaps in Pedestrian-Accessible Lakeshore 14%
Fitness Zone Priority Neighborhoods 14%
Wildlife Viewing 12%
Opportunities for Shoreline Fishing 12%
Scenic Views from Lake Worth Parks 12%
Suitable Locations for Camping 9%
Recreation Opportunities Close to Lake Worth 8%
Opportunities for Lakeshore Non-Motorized Boat Access 7%
Gaps in Lakeshore Motorized Boat Access 7%
Planned Parking Improvements 2%
Planned Playground Improvements 2%

Planned Parking Improvements

Planned Playground Improvements

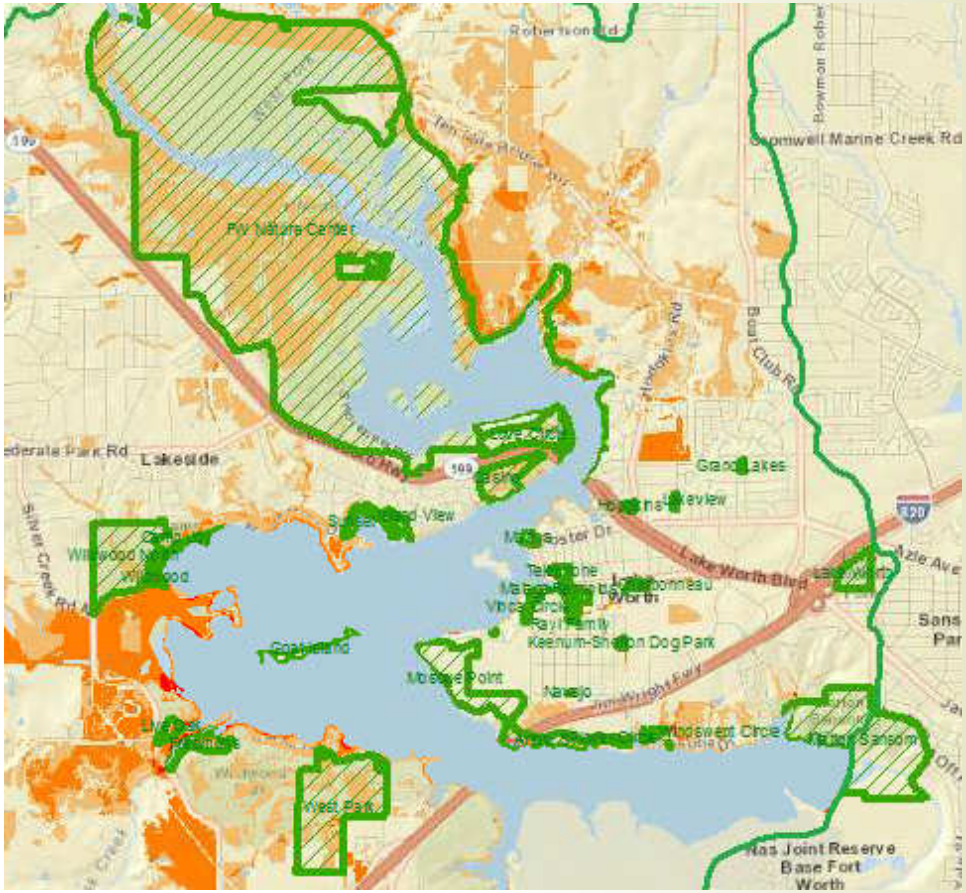
Gaps in Pedestrian Access to Lakeshore

Opportunities for Shoreline Fishing

Opportunities Non-Motorized Boat

Gaps in Motorized Boat Access

Recreation Access Opportunities



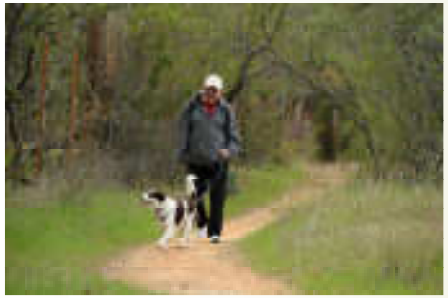
Recreation Access Priorities within existing parks

Connectivity Needs and Opportunities

Connectivity Needs (40%)
- Population density
- Planned developments
- % Children under age of 19
- % Low income households
- Connections to schools
- Connections to bus stops
- Connections to residential areas
- Connections to places of worship

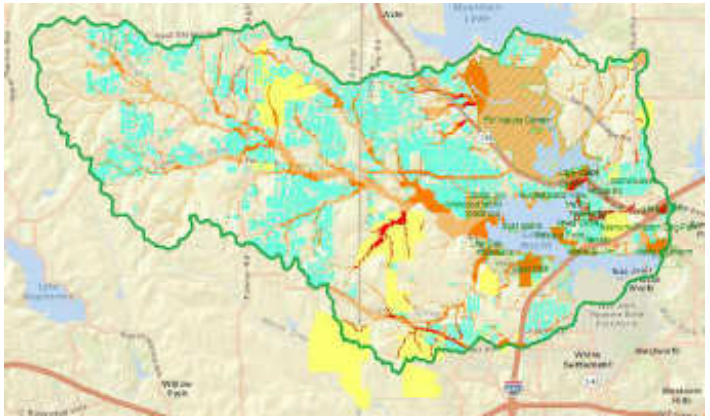
Connectivity Opportunities (60%)
- Existing parks
- Vacant lands
- Undeveloped riparian corridors
- Floodplains
- East / west road corridors

Connectivity Needs



Connectivity Opportunities

Connectivity Opportunities



… connecting existing and future neighborhoods

… compared to conceptual trail corridors

Next Steps

Over the next two months:

- Refine draft Greenprint maps
- Conduct research around conservation funding options
- Begin discussions of marketing component
- Form implementation subgroup

At the next LWRCC meeting (April):

- Present results from one additional economic study - Value of riparian corridor protection
- Present revised Greenprint maps
- Revisit action planning discussion. Includes discussing conservation finance research findings.

THANK YOU!