The Lake Worth Greenprint  
(*working title*)

Lake Worth Regional Coordinating Committee Meeting

February 20, 2014
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.
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%

- Canopy Cover
- Native Vegetation
- Erodible Soils
- Steep Stream Banks
- Floodplains and Buffers
- Steep Slopes
- Riparian Vegetation
- Wetlands
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.
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%
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 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!