



# W. E. T.

## Water Elevation Technologies

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Status Report:

Analysis of Costs Associated with Obtaining  
Elevation Certificates for Low-Income Households  
in San Marcos, Texas

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# 1. Overview

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## 1.1. Summary

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Overall, the project is running smoothly. There are no changes anticipated to scope, purpose, or material delivered. Relative to the schedule provided with the proposal, W. E. T. is slightly (about a week) behind, owing to unanticipated absences among group members. However, this delay should not impact the promised delivery date of May 4, 2007.

## 1.2. Timetable

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	Data Collection/ Acquisition	Data Pre-processing	Analysis	Web Site	Meta-data	Interpretation	Final Deliverables
29 Jan							
05 Feb							
12 Feb							
19 Feb							
26 Feb							
05 Mar							
12 Mar							
19 Mar							
26 Mar							
2 Apr							
9 Apr							
16 Apr							
23 Apr							
30 Apr							

**Key:**

	As originally scheduled
	Early start (work before scheduled start)
	Late start (schedule showed work, but none performed)
	Late finish (work after scheduled finish)
	Anticipated late start (schedule showed work, but work no longer expected)
	Original schedule

### 1.3. Budget

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The budget has not changed since the original proposal, and no unanticipated costs have been incurred. The budget provided below is from the proposal and continues to stand as the current budget.

#### **Personnel**

3 Analysts × 10 hours/week × 12 weeks × \$40/hour	\$	14,400.00
1 Project Leader × 10 hours/week × 12 weeks × \$55/hr	\$	<u>6,600.00</u>
<i>Personnel Subtotal</i>	\$	21,000.00

#### **Equipment**

No equipment needed	\$	0.00
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#### **Travel**

No travel expected	\$	0.00
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#### **Miscellaneous**

Office supplies and printing	\$	1,000.00
Computer maintenance and repair	\$	1,000.00
Contingency	\$	<u>2,000.00</u>
<i>Miscellaneous Subtotal</i>	\$	4,000.00

<b>Grand Total</b>	<b>\$</b>	<b>25,000.00</b>
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## 2. Status Report by Phase

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### 2.1. Data Collection and Acquisition

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*Scheduled Start:* week of January 29, 2007

*Actual Start:* January 31, 2007

*Scheduled Completion:* week of February 19, 2007

*Actual Completion:* February 21, 2007

Data Collection and Acquisition was completed before the proposal was submitted; all data has been received.

### 2.2. Data Pre-Processing

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*Scheduled Start:* week of February 12, 2007

*Actual Start:* February 12, 2007

*Scheduled Completion:* week of March 26, 2007

*Actual Completion:* April 2, 2007

Data pre-processing consisted mainly of modifying tabular data provided to exactly match addresses in the attributes of the parcel files to which they were joined. Some addresses, particularly in past claims, could not be matched exactly; some of these appear to be correct addresses on City of San Marcos streets, but no parcel matches the building number provided. Due to absences by group members, this phase was finished slightly later than anticipated.

### 2.3. Analysis

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*Scheduled Start:* week of March 5, 2007

*Actual Start:* February 28, 2007

*Scheduled Completion:* week of April 9, 2007

*Actual Completion:* in progress

Analysis consists almost exclusively of creating layers consisting of parcels which meet various spatial and income criteria in order to later

provide a range of possible amounts required for the Community Development Block Grant (CDBG.) The actual task of calculating the costs associated with the different criteria will occur during the Interpretation phase.

## 2.4. Web Site

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*Scheduled Start:* week of March 5, 2007

*Actual Start:* March 17, 2007

*Scheduled Completion:* week of April 30, 2007

*Actual Completion:* in progress

The web site to be created with the project has been designed and some content has been added; it is not currently accessible through the Internet.

## 2.5. Metadata

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*Scheduled Start:* week of March 19, 2007

*Actual Start:* March 5, 2007

*Scheduled Completion:* week of April 16, 2007

*Actual Completion:* In Progress

Metadata will be created for all layers created or edited by W. E. T. Metadata is in progress, but it has been created for all files edited during Data Pre-Processing and for nearly all data created so far during analysis.

## 2.6. Interpretation

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*Scheduled Start:* week of April 2, 2007

*Actual Start:* not yet started

*Scheduled Completion:* week of April 23, 2007

Interpretation of data will consist of combining spatial criteria (showing areas at risk of flooding) and income criteria (showing properties owned or occupied by low-income families. Due to the late end of data pre-processing, interpretation has been delayed in starting.

## 2.7. Final Deliverables

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*Scheduled Start:* week of April 9, 2007

*Actual Start:* Not yet started

*Scheduled Completion:* week of April 30, 2007

Due to the late start in interpretation, the start of the preparations of final deliverables will be delayed somewhat; it is our estimation that work on deliverables will start during the week of April 16, 2007.



## 3. Data

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### 3.1. Files Edited

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The following files were modified from their original form:

- 485505 Historical Claims 043006.xls – Addresses modified to match parcel data exactly, where possible
- 485505 Active Policies 043006.xls – Addresses modified to match parcel data exactly, where possible
- Elevation\_Certificate2.shp – Modified from Elevation Certificate.shp; addresses modified to match AddressPoints.shp attributes.

### 3.2. Files Created

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As of April 4, 2007, the following layer files and shapefiles have been created:

- 1998 outside floodplain.shp – Contains areas outside the floodplain inundated in the flood of October, 1998. Polygon file created by digitizing the CADD file gpsfm98.dwg.
- Active Policies.lyr – Layer containing the subset of Parcels.shp with active flood insurance policies. Polygon file created by attribute join.
- Parcels in 500-yr floodplain.lyr – Layer containing the subset of Parcels.shp in the polygon defined by Flood\_500yr.shp. Polygon file created by spatial join.
- Parcels with Elevation Certificates.shp – Shapefile containing parcels with elevation certificates. Polygon file created by exporting the result of a spatial join between the points in Elevation\_Certificates.shp and Parcels.shp.

### 3.3. Final Deliverables

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The deliverables at the conclusion of the project will include the following (this has not changed since the proposal:)

- Final Report (2 copies; paper)
- Poster for Display
- All data used or created
- Website
- CD containing the following: (2 copies)
  - Data provided (as modified during the pre-processing phase)
  - Data generated as the result of analysis
  - Metadata
  - Electronic copy of Final Report in MS Word format.
  - Electronic copy of Poster for Display
  - PowerPoint Presentation
  - “Readme” directions on use of the CD

## 4. Participation

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### **David Lynch**

Project Manager, Webmaster

**Proposal:** Methodology, Budget, Timetable, Final Deliverables

**Project:** Web Site, Development of Block Grant, Data Editing and Analysis, Status Report

### **Clinton Buehring**

GIS Analyst

**Proposal:** Summary, Purpose, Conclusions, Participation

**Project:** Contact for Surveyors and Insurance, Data Editing and Analysis

### **Jeff Gravett**

GIS Analyst

**Proposal:** Data

**Project:** Data Editing and Analysis

### **Miriam Mosher**

GIS Analyst, Metadata Master

**Proposal:** Scope, Implications, References, Logo

**Project:** Metadata, Income data, Data Editing and Analysis, 3D Mapping