Atascosa River Impairment Verification

Total Maximum Daily Load Program
Water Section
Texas Commission on Environmental Quality

Project History

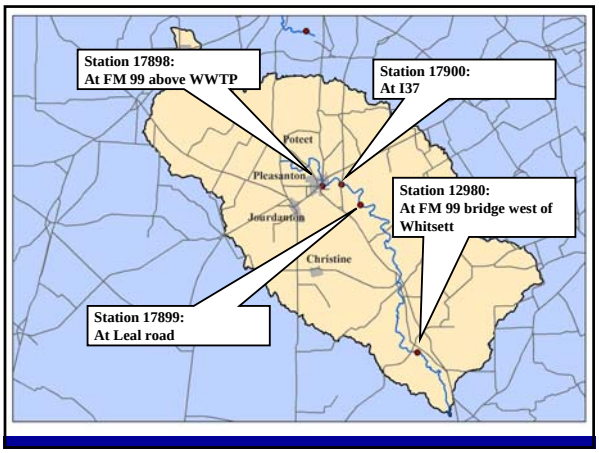
1996	Atascosa River included on 303(d) list for impairments to recreational and aquatic life uses
2000	New data requirements implemented for the identification of impairments
2002-2004	Project conducted to collect new data
2005	Data collected by the project supports continued impairment for 303(d) List
2006	Project "on hold to allow for bacteria TMDL assessment
2007	Recommendations of the Bacteria TMDL Task Force adopted project resumes

Monitoring Plan

3 Stations within the area of impairment
(one station added)

Field and chemical parameters sampled at least ten times

Biological samples will be collected 3 times



Impairment Verification Monitoring

August 2002-August 2004

Field Parameters

Chemical Parameters

Biological Parameters

Impairment Verification Monitoring

August 2002-August 2004

Field Parameters

Chemical Parameters

Biological Parameters

24-Hour Dissolved Oxygen
Temperature
Conductivity
pH
Flow

Impairment Verification Monitoring

August 2002-August 2004

Field Parameters

Chemical Parameters

Biological Parameters

Alkalinity
TSS
Sulfate
Chloride
Chlorophyll a
CBOD
Fecal coliform\E. coli

Impairment Verification Monitoring

August 2002-August 2004

Field Parameters

Chemical Parameters

Biological Parameters

Nekton Assessments

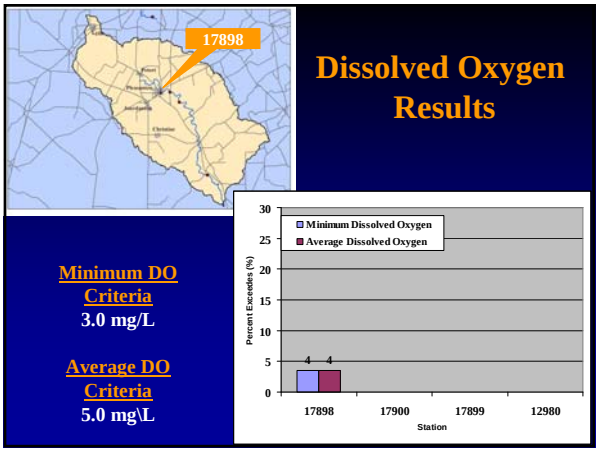
Benthic Assessments

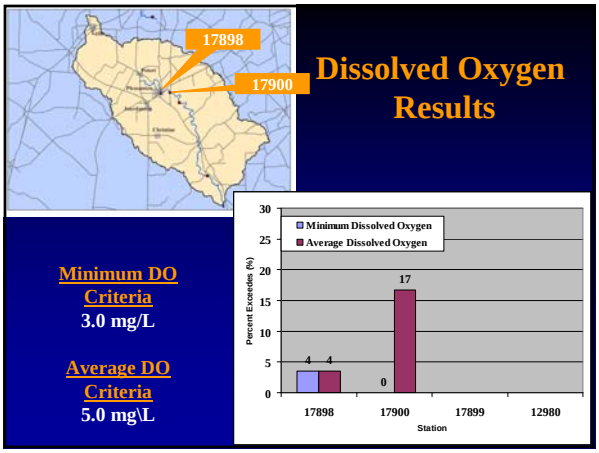
Habitat Assessments

Potential Outcomes

1. Conduct TMDL
2. Adjust Water Quality Standard
(aquatic life use only)
3. Remove impairment from 303(d) List
4. Collect additional data

Results


17898
Dissolved Oxygen Results
Minimum DO Criteria
3.0 mg/L
Average DO Criteria
5.0 mg\L
Minimum Dissolved Oxygen
Average Dissolved Oxygen
Percent Exceedes (%)
30
25
20
15
10
5
0
4
4
17898
17900
17899
12980
Station


17898
17900
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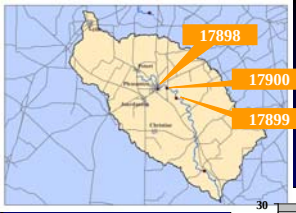
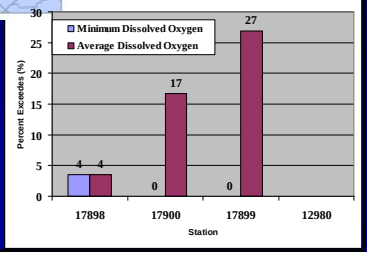
Percent Exceedes (%)
30
25
20
15
10
5
0
4
4
0
17
17898
17900
17899
12980
Station

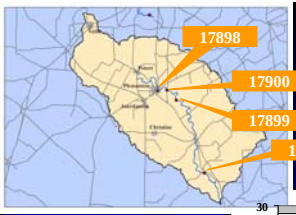


Dissolved Oxygen Results

Minimum DO Criteria
3.0 mg/L

Average DO Criteria
5.0 mg\L





Dissolved Oxygen Results

Minimum DO Criteria
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Average DO Criteria
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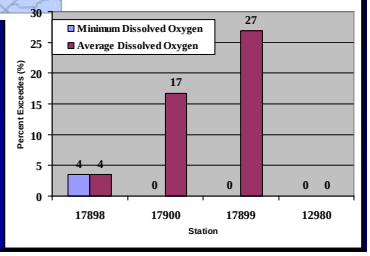
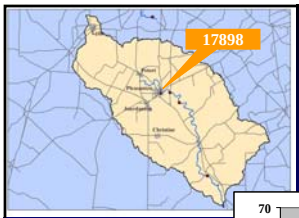
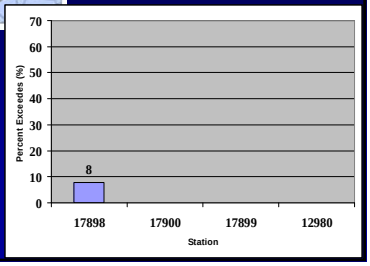


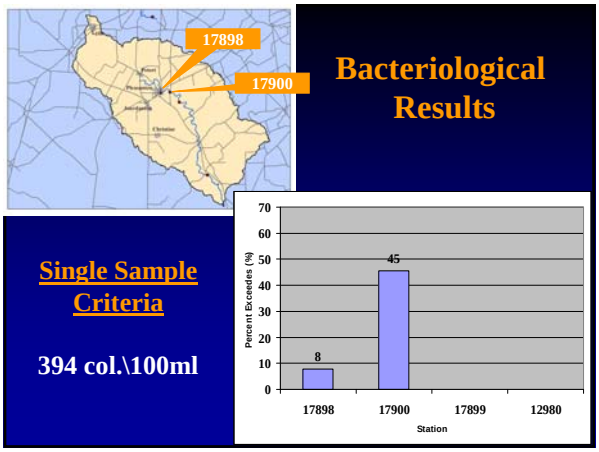


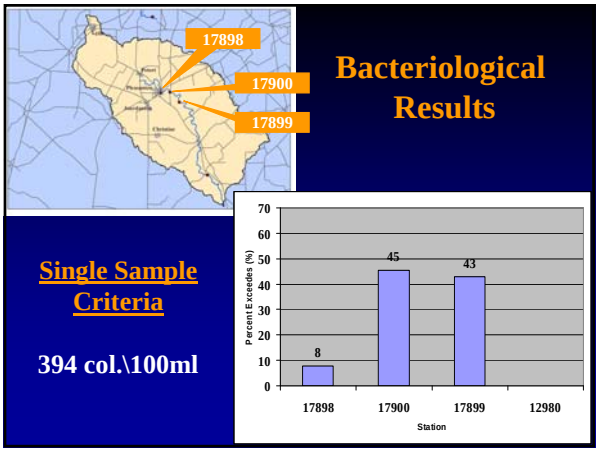
Bacteriological Results

Single Sample Criteria

394 col.\100ml




17898
17900
Bacteriological Results
Single Sample Criteria
394 col.\100ml
Percent Exceedes (%)
70
60
50
40
30
20
10
0
8
45
17898
17900
17899
12980
Station


17898
17900
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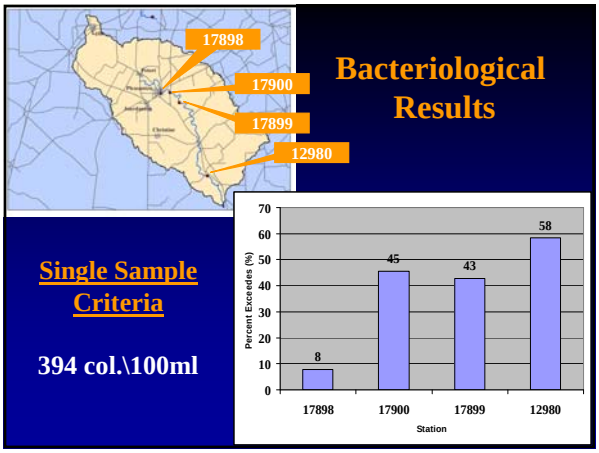
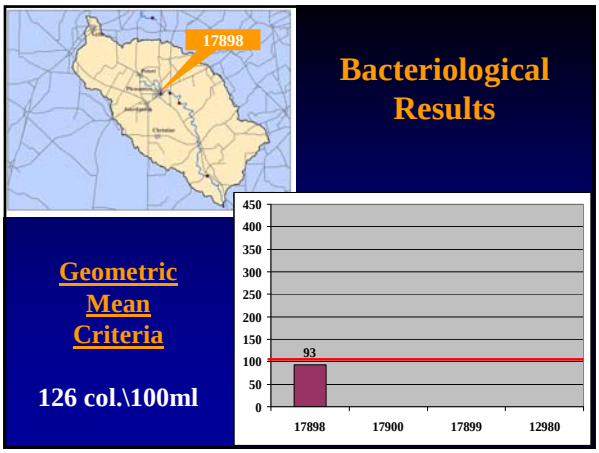
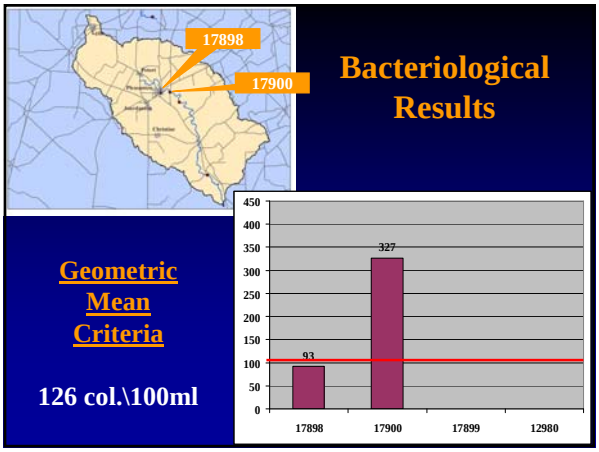
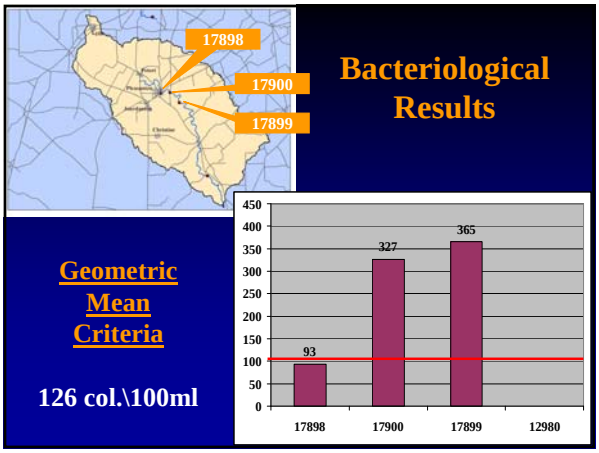
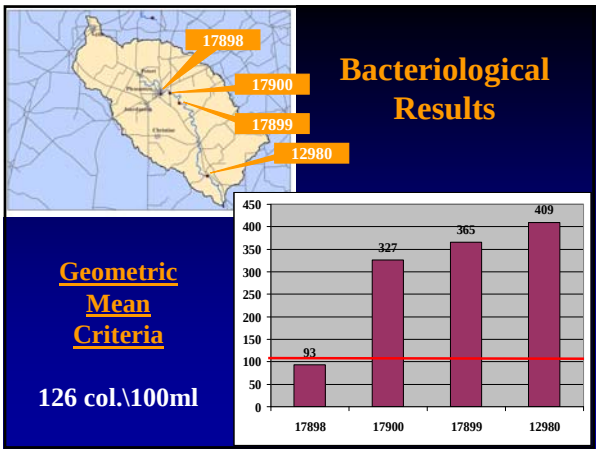
Bacteriological Results
Single Sample Criteria
394 col.\100ml
Percent Exceedes (%)
70
60
50
40
30
20
10
0
8
45
43
17898
17900
17899
12980
Station


17898
17900
17899
12980
Bacteriological Results
Single Sample Criteria
394 col.\100ml
Percent Exceedes (%)
70
60
50
40
30
20
10
0
8
45
43
58
17898
17900
17899
12980
Station


17898
Bacteriological Results
Geometric Mean Criteria
126 col.\100ml
450
400
350
300
250
200
150
100
50
0
93
17898
17900
17899
12980


17898
17900
Bacteriological Results
Geometric Mean Criteria
126 col.\100ml
450
400
350
300
250
200
150
100
50
0
327
93
17898
17900
17899
12980


17898
17900
17899
Bacteriological Results
Geometric Mean Criteria
126 col.\100ml
450
400
350
300
250
200
150
100
50
0
365
327
93
17898
17900
17899
12980



Aquatic Life Use Outcome

1. Conduct TMDL
2. Adjust Water Quality Standard
(aquatic life use only)
3. Remove impairment from 303(d) List
4. Collect additional data

Recreational Use Outcome

1. Conduct TMDL
2. Adjust Water Quality Standard
(aquatic life use only)
3. Remove impairment from 303(d) List
4. Collect additional data

Project Reports

www.tceq.state.tx.us/implementation/water/

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