

Current Status of the Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d)

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Surface Water Quality Monitoring

Guidance Advisory Workgroup Meeting

June 16, 2011

Background

- Statewide assessment of the status of state waters
 - Compares water quality data to approved water quality standards
 - Identifies impaired waters (303(d) List)
- Requirements
 - Federal Clean Water Act, Sections 305(b) and 303(d)
 - Title 30 of the Texas Administrative Code (30 TAC)
- Conducted every two years
 - Draft due to EPA on April 1 of even numbered years

2010 Milestones

- Advisory workgroup – June 2009
- Assessment Time Period – June-Sept 2009
- Data Providers Coordination – December 2009
- Public Comment – Feb 2010
- TCEQ Agenda – August 25, 2010
- EPA Submission – Sept 17, 2010

Integrated Report Documents

- Executive Summary
- Guidance for Assessing and Reporting Surface Water Quality in Texas
- 303(d) List (Category 5)
- Delistings
- New Listings
- Schedule to Develop TMDLs for Category 5a Water Bodies
- Water Quality Concerns
- Sources of Pollution for Impairments and Concerns
- Public Comment and Response
- Water Body Assessments by River Basin
- Cost/Benefit Assessment
- Trophic Assessment of Texas Reservoirs

Integrated Report Documents (cont)

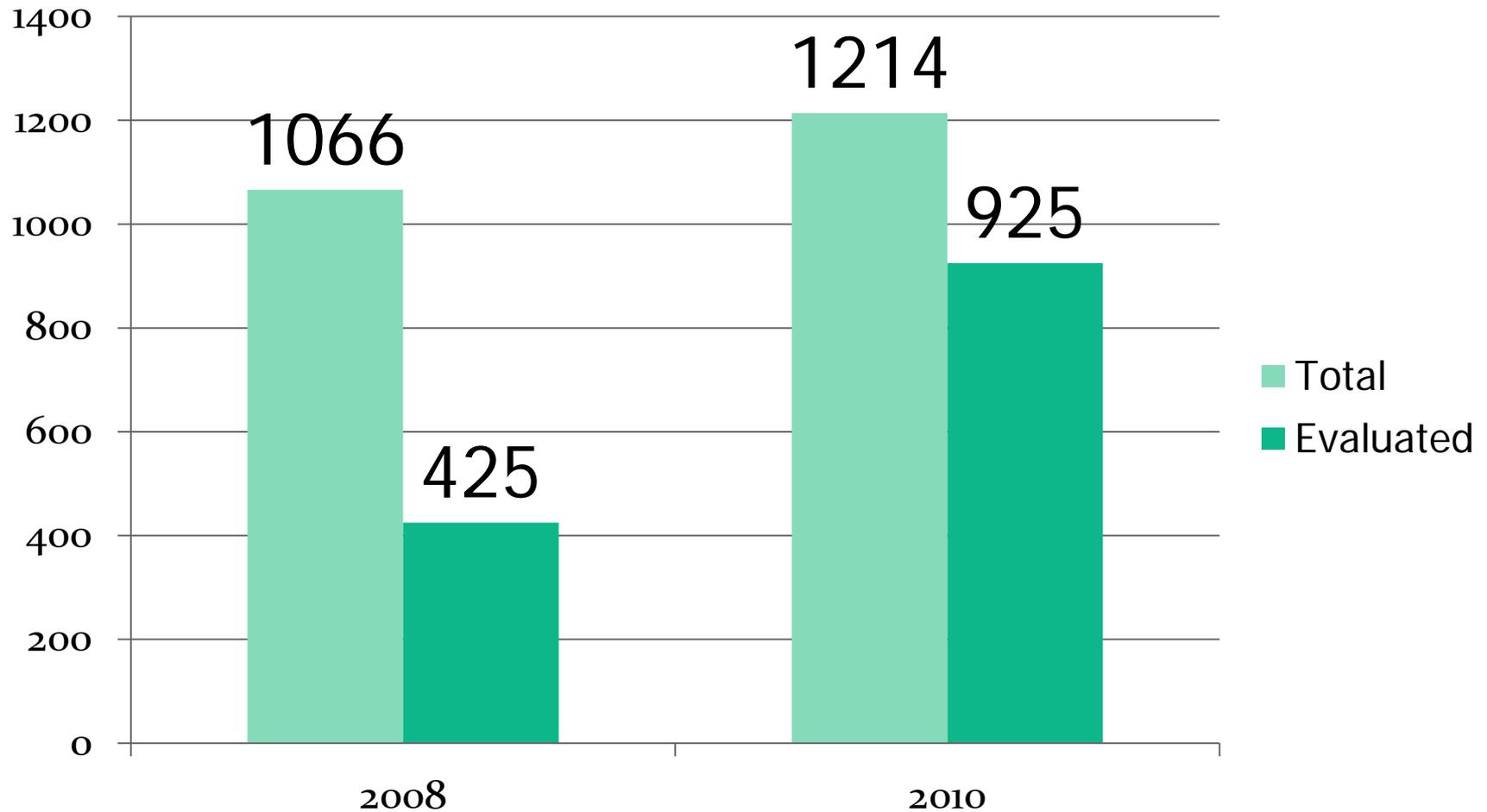
- **Electronic data files summarizing the assessment results for EPA's Assessment Database**
- **Assessment Unit\Station Relationship Changes since 2008**
- **Index of Water Quality Impairments**
- **Water Bodies Evaluated**
- **Five-part categorization of waters**
- **Water Body Assessments by River Basin**
- **Changes to the Draft Following Public Comments**
- **Water Pollution Control Program**
- **Monitoring Program**
- **Statistically-Based Monitoring in Texas**
- **Water Quality Inventory Summary of Uses**
- **Texas Groundwater Assessment**

Challenges

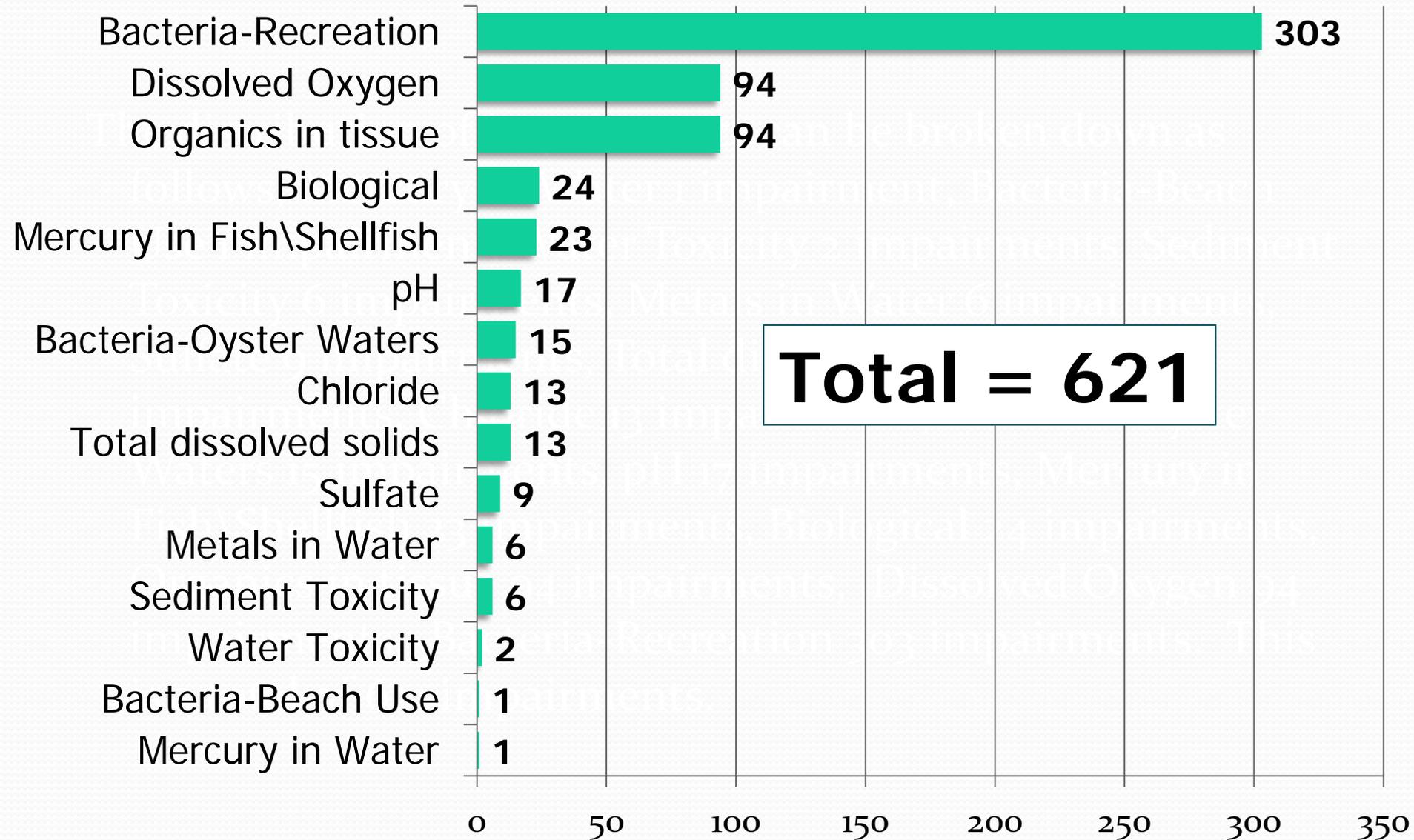
- Water Quality Standards Revisions
- Metals in Water Data
- Beach Watch Assessments
- Biological Assessment
- GIS Data

Assessment Summary

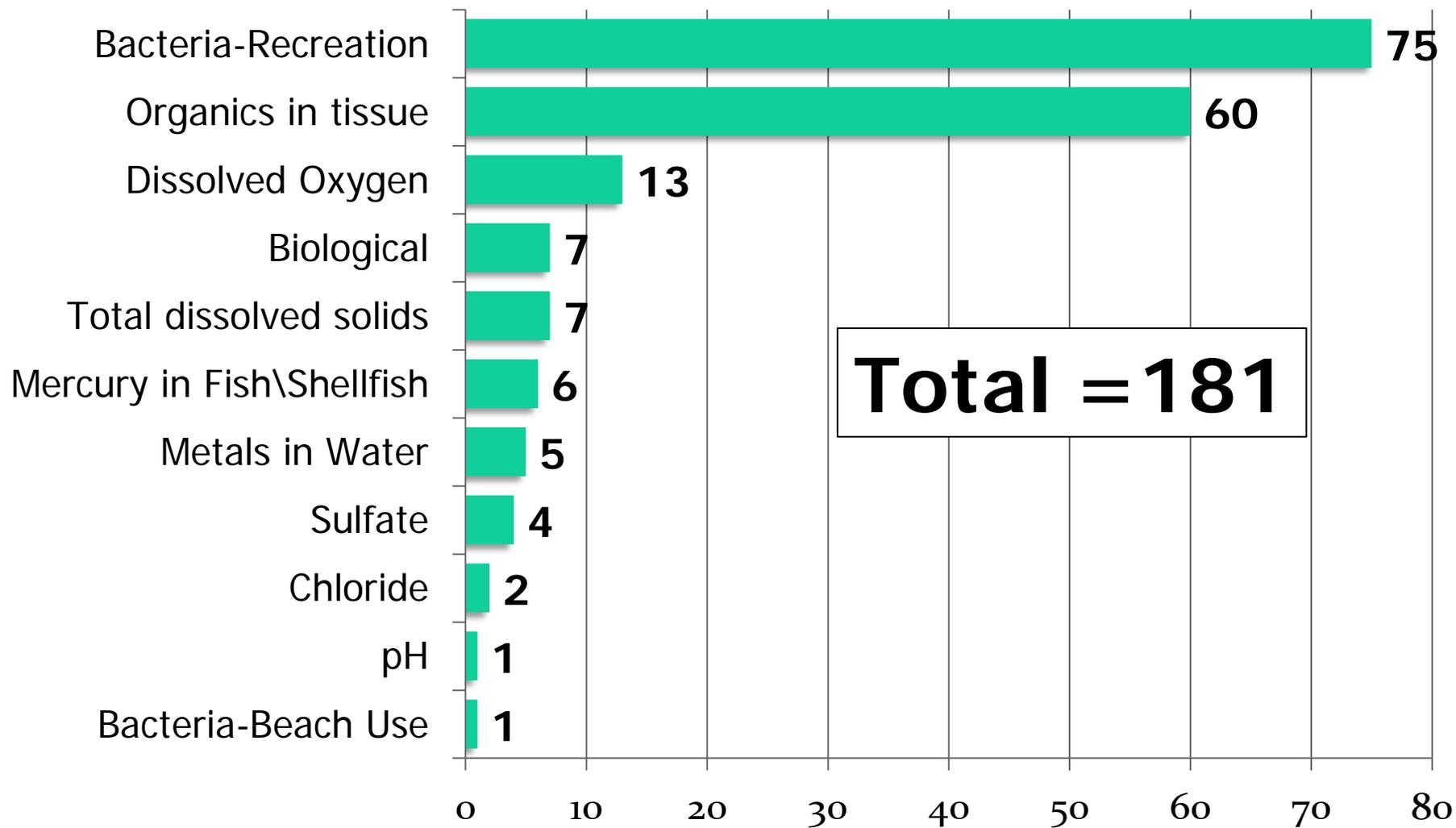
Waterbodies



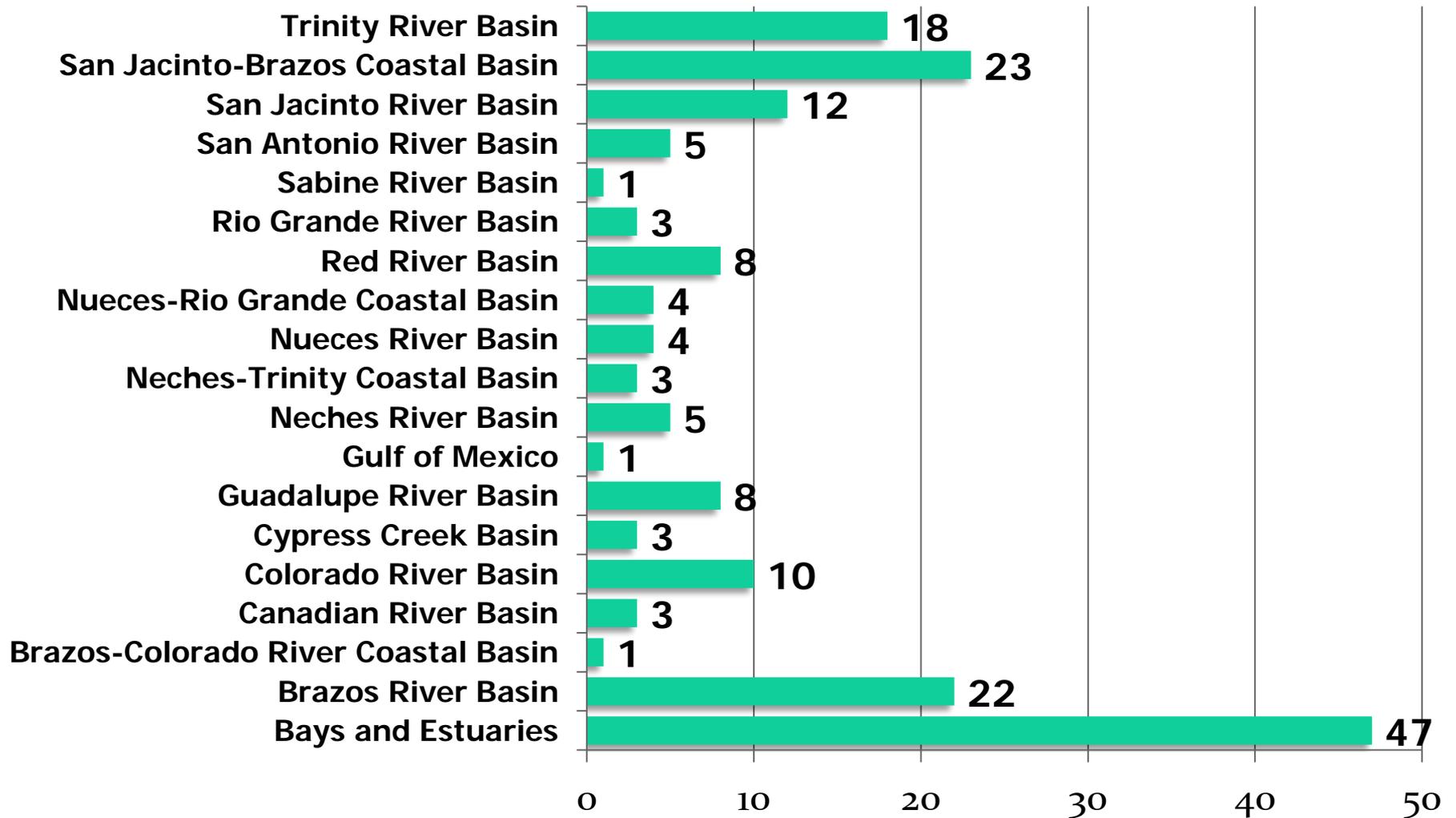
Impairments



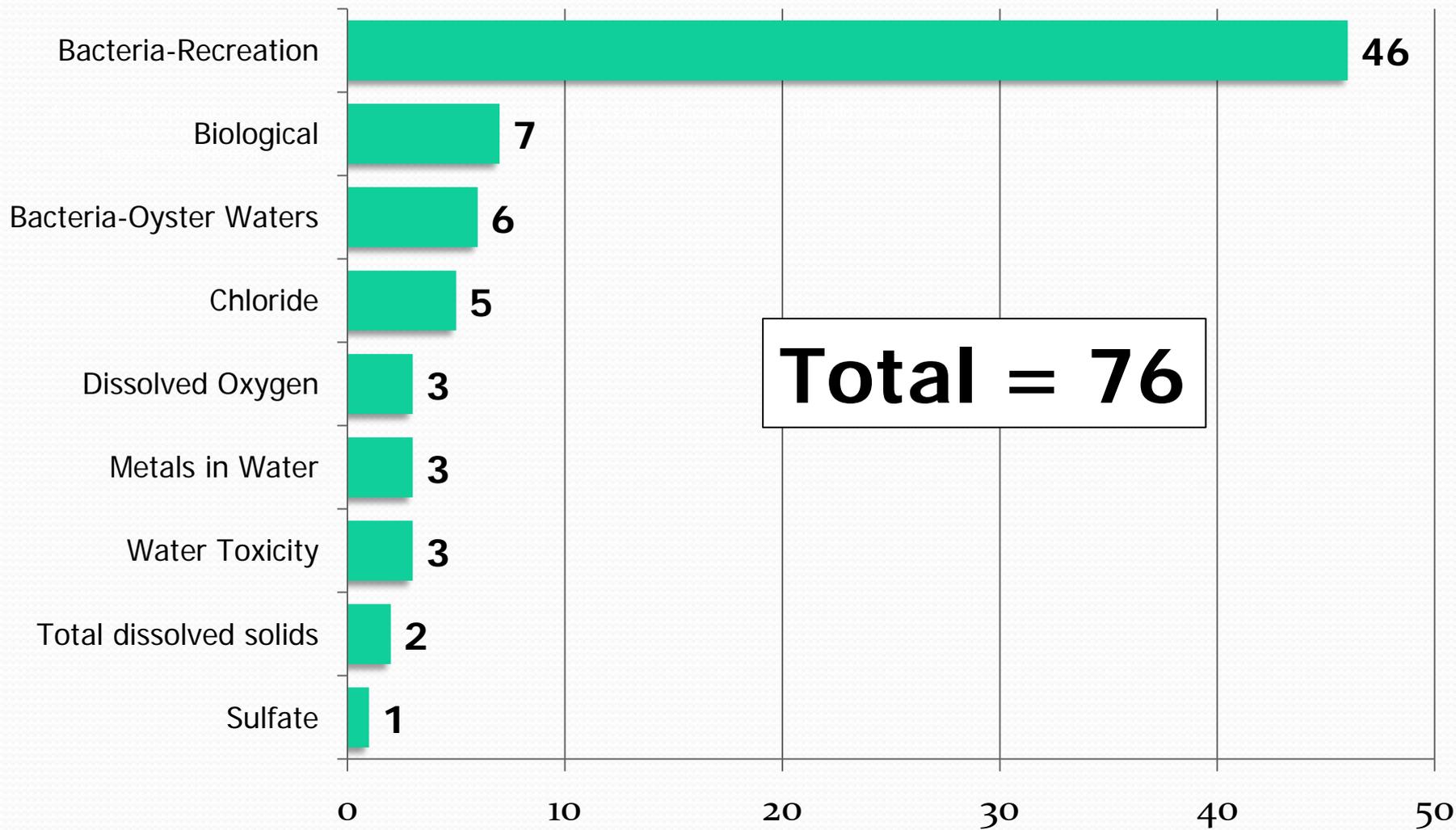
New Impairments



New Impairments by Basin



Delistings

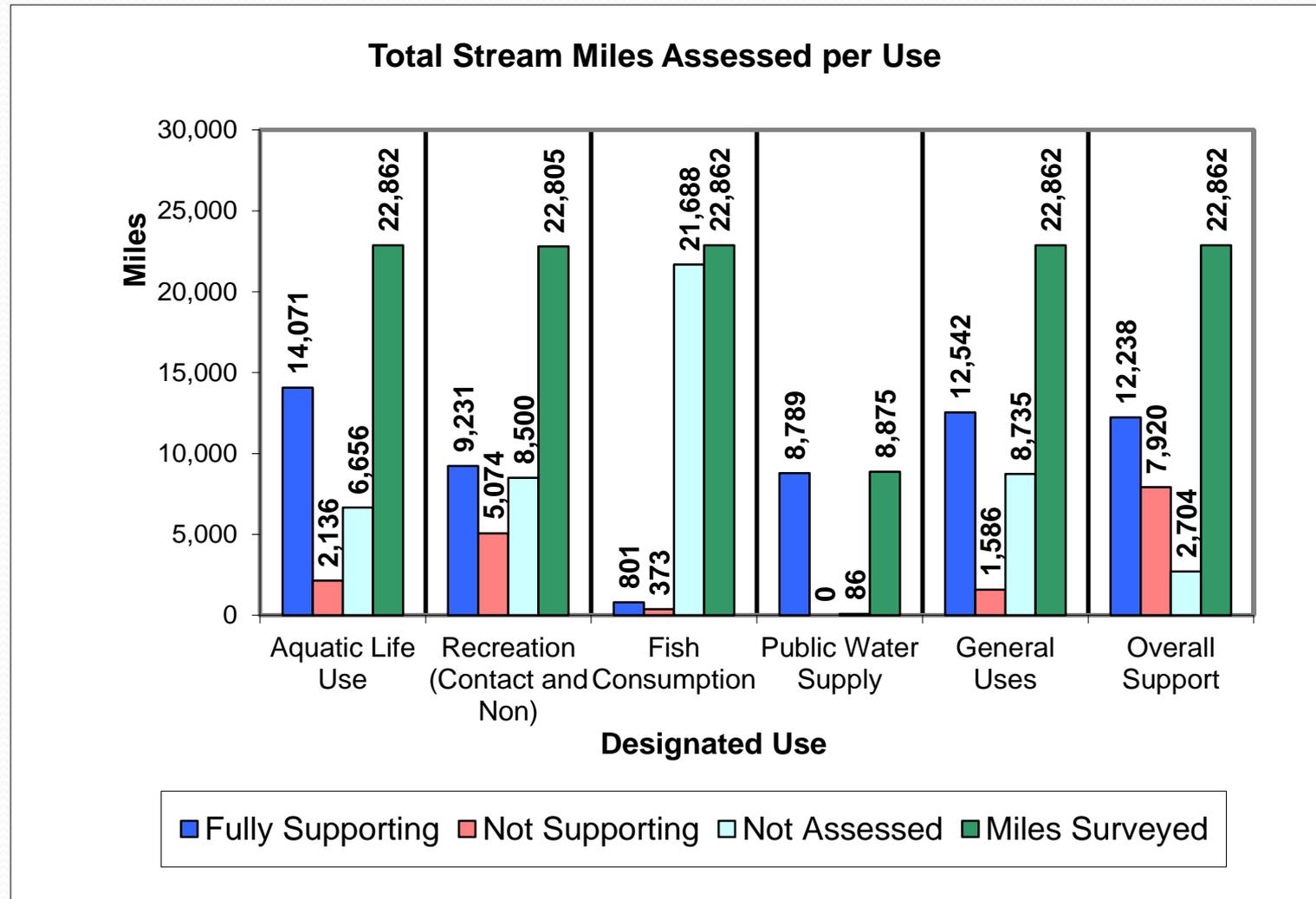


Schedule to Develop TMDLs

SegID	Segment Name
805	Upper Trinity River
822A	Branch
822B	Grapevine Creek
1004E	Stewart's Creek
1006D	Halls Bayou
1006F	Big Gulch Above Tidal
1006H	Spring Gully Above Tidal
1006I	Unnamed Tributary of Halls Bayou
1006J	Unnamed Tributary of Halls Bayou
1007B	Brays Bayou Above Tidal
1007C	Keegans Bayou Above Tidal
1007D	Sims Bayou Above Tidal
1007E	Willow Waterhole Bayou Above Tidal
1007F	Berry Bayou Above Tidal
1007G	Kuhlman Gully Above Tidal
1007H	Pine Gully Above Tidal
1007I	Plum Creek Above Tidal
1007K	Country Club Bayou Above Tidal
1007L	Unnamed Tributary of Brays Bayou
1007M	Unnamed Tributary of Hunting Bayou
1007N	Unnamed Tributary of Sims Bayou
1007O	Unnamed Tributary of Bayou
1007R	Hunting Bayou Above Tidal

SegID	Segment Name
1008	Spring Creek
1008H	Willow Creek
1009	Cypress Creek
1009C	Faulkey Gully
1009D	Spring Gully
1009E	Little Cypress Creek
1010	Caney Creek
1011	Peach Creek
1103	Dickinson Bayou Tidal
1103A	Bensons Bayou
1103B	Bordens Gully
1103C	Geisler Bayou
1103D	Gum Bayou
1104	Dickinson Bayou Above Tidal

Summary of Uses



Reservoir Condition

Carlson Index (TSI) – Chlorophyll a

– Top 5

Segment	Station	Reservoir	Chla Rank	Chla Records	Chla Mean (ug/L)	Chla TSI	10 -Year Change (Chla TSI)
1249	12111	LAKE GEORGETOWN	1	4	1.5	34.58	-2.48
408	10329	LAKE BOB SANDLIN	2	7	2.96	41.22	-3.53
1404	12302	LAKE TRAVIS	3	44	2.98	41.28	3.07
811	10970	LAKE BRIDGEPORT	4	6	3.4	42.6	-4.01
1403	12294	LAKE AUSTIN	5	43	3.5	42.92	4.56

– Bottom 5

Segment	Station	Reservoir	Chla Rank	Chla Records	Chla Mean (ug/L)	Chla TSI	10 -Year Change (Chla TSI)
1212	11881	SOMERVILLE LAKE	96	12	42.14	67.3	15.93
1242A	16781	OLD MARLIN CITY LAKE	97	21	42.96	67.48	NA
1241A	11529	BUFFALO SPRINGS LAKE	98	8	55.08	69.92	3.98
219	10163	LAKE WICHITA	99	9	107.02	76.44	14.87
105	10060	RITA BLANCA LAKE	100	13	366.84	88.52	20.13

Reservoir Condition

Carlson Index (TSI) – Secchi Depth

– Top 5

Segment	Station	Reservoir	Secchi Rank	Secchi Records	Secchi Mean (Meters)	Secchi TSI
1216	11894	STILLHOUSE HOLLOW LAKE	1	81	3.58	41.6
1404	12302	LAKE TRAVIS	2	42	3.42	42.24
1241A	18414	LAKE ALAN HENRY	3	8	3.32	42.76
1909	12825	MEDINA LAKE	4	22	3.04	44.02
1805	12597	CANYON LAKE	5	27	2.72	45.58

– Bottom 5

Segment	Station	Reservoir	Secchi Rank	Secchi Records	Secchi Mean (Meters)	Secchi TSI
219	10163	LAKE WICHITA	110	13	0.34	75.26
1413	12367	LAKE J B THOMAS	111	14	0.34	75.3
2454A	12514	COX LAKE	112	29	0.32	76.04
1253	16247	SPRINGFIELD LAKE	113	38	0.3	76.98
105	10060	RITA BLANCA LAKE	114	23	0.08	97.74

Reservoir Condition

Carlson Index (TSI) – Total Phosphorus

– Top 5

Segment	Station	Reservoir	TP Rank	TP Records	TP Mean (mg/L)	TP TSI
1405	12319	LAKE MARBLE FALLS	1	54	0.02	50.3
0404A	14473	ELLISON CREEK RESERVOIR	2	3	0.02	50.6
614	10639	LAKE JACKSONVILLE	3	38	0.02	51.1
1909	12825	MEDINA LAKE	4	30	0.02	51.5
223	10173	GREENBELT RESERVOIR	5	27	0.02	51.7

– Bottom 5

Segment	Station	Reservoir	TP Rank	TP Records	TP Mean (mg/L)	TP TSI
1209A	11792	COUNTRY CLUB LAKE	108	10	0.36	88.7
1229	17110	SQUAW CREEK RESERVOIR	109	11	0.48	93.1
1008F	16482	LAKE WOODLANDS	110	36	0.88	102
0229A	10192	LAKE TANGLEWOOD	111	36	1.14	105.6
105	10060	RITA BLANCA LAKE	112	21	3.48	121.7

Successes

- Data provider coordination
- Water quality standards coordination
- Beach Watch Assessments
- Plum Creek 4b Justification
- Assessment Unit improvements

2012 Preparations

- Database Preparation
 - SWQMIS
 - Loading, verifying and validating data
 - Internal databases
- Assessment tools
 - Water quality standards
 - GIS
- Assessment guidance changes

2012 Goals

- Timely submission
- Increased level of certainty for impairment identification
 - Remedial efforts will address real problems
 - Increases likelihood of success
- Implementation of new WQS
- Investigate methods to answer the question, “Is water quality improving?”

Additional Information

- 2010 Integrated Report
 - <http://www.tceq.texas.gov/compliance/monitoring/water/quality/data/10twqi/10twqi>
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