Texas Surface Water Quality Standards Update

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Water Quality Standards

- The Texas Surface Water Quality Standards (TSWQS), Title 30, Chapter 307 of the Texas Administrative Code, describe the chemical, physical, and biological conditions to be attained in the surface waters of Texas.
- Authority for adopting and revising water quality standards is contained in §26.023 of the Texas Water Code (TWC), and in §303(c) of the Federal Clean Water Act.

Triennial Revision Process

- Preliminary comments
- Work group meetings
- Proposal rule package with preamble
  - Fiscal note
- Public comment period
  - Public hearing
- Adoption rule package
  - Response to comments

Types of Actions by EPA

- **Approved** – available for use in all Clean Water Act (CWA) activities – permitting, 305(b) assessment, TMDL
  - **Conditional approval** – subject to completion of consultation with USFWS under Endangered Species Act
- **Disapproved** – not available for use in CWA activities
- **No action** – not considered water quality standards under the CWA
- **Under review** – the previously EPA approved revision of the TSWQS remain in effect for CWA purposes

EPA Actions

- Action letters are posted on TCEQ Website for each TSWQS revision to which they apply
  - **2022 TSWQS Website:** https://www.tceq.texas.gov/waterquality/standards/2022-texas-surface-water-quality-standards
- Highlighted rule indicates status of approval
  - **2022 TSWQS highlighted rule**: https://www.tceq.texas.gov/downloads/water-quality/standards/2022/highlighted-standards.pdf

EPA Action Letters since the last SWQSAWG Meeting

- March 19, 2020
- May 19, 2020
- July 16, 2020
- March 18, 2021
- April 26, 2023
- August 18, 2023
- October 11, 2024
- November 26, 2024

EPA Approval – March 2020 Letter

2014 TSWQS Revision

- Appendix A – Site-specific Uses and Criteria for Classified Segments
  - Hillebrandt Bayou (0704): site-specific dissolved oxygen criteria 2.5 mg/L (minimum)
  - Lower Atascosa River (2107): site-specific dissolved oxygen criteria 4.0 mg/L (average)
  - Upper Atascosa River (2118): new segment, Intermediate Aquatic Life Use, site-specific dissolved oxygen criteria 4.0 mg/L (average)
    - Removal of public water supply use

EPA Approval – March 2020 Letter Cont.

2014 TSWQS Revision

- Appendix C – Segment Boundary Descriptions
  - Segment 2107: Lower Atascosa River from the confluence with the Frio River in Live Oak County to the confluence with Borrego Creek in Atascosa County
  - Segment 2118: Upper Atascosa River from the confluence with Borrego Creek to the confluence with Galvan Creek in Atascosa County

EPA Approval – March 2020 Letter Cont.

2014 TSWQS Revision

- Appendix D – Site-specific Uses and Criteria for Unclassified Water Bodies
  - Flag Lake Drainage Canal (1111): Intermediate aquatic life use
  - Skull Creek (1402): seasonal dissolved oxygen criteria
  - Wilbarger Creek (1434): split perennial and intermittent portions
  - Unnamed Tributary of Wilbarger Creek (1434): perennial stream
  - Atascosa River (2118): intermittent portion

EPA Approval – May 2020 Letter

2014 TSWQS Revision

- Inclusion of “Primary Contact Recreation 2”
  - §307.3(a). Definitions
  - §307.4(j). Aquatic Recreation
  - §307.7(b)(1). Recreation

EPA Approval – July 2020 Letter

2018 TSWQS Revision

- Appendix C – Segment Boundary Descriptions
  - Sabine River Tidal (0501)
  - Sabine River Above Tidal (0502)
- Appendix D – Site-specific Uses and Criteria for Unclassified Water Bodies
  - Catfish Creek (0804): seasonal dissolved oxygen criteria
  - Hurricane Levee Canal (2437): Intermediate aquatic life use
  - Garcitas Creek (2453): seasonal dissolved oxygen criteria

EPA Approval – March 2021 Letter

2018 TSWQS Revision

- §307.2. Description of Standards
  - §307.2(g) – New and revised provisions for “Temporary standards”
- Appendix D – Site-specific Uses and Criteria for Unclassified Water Bodies
  - Bois d’Arc Creek (0202): High aquatic life use for portion
  - Elm Creek (1803): Intermediate aquatic life use
  - Sandies Creek (1803): Intermediate aquatic life use

EPA Approval – April 2023 Letter

2022 TSWQS Revision

- §307.3. Definitions and Abbreviations
  - Added a definition for “bioaccumulation factor”
  - Revised definition for “method detection limit”
  - Added abbreviations for “bioaccumulation factor” and “municipal utility district”
- §307.6. Toxic Materials
  - Footnotes revised in Table 1 (aquatic life) and Table 2 (human health)

EPA Approval – April 2023 Letter Cont.

2022 TSWQS Revision

- Appendix A – Site-specific Uses and Criteria for Classified Segments
  - Brushy Creek (1244): portion removed from public water supply
  - Upper North Bosque River (1255): intermittent w/ pools portion
  - San Migel Creek (2108): secondary contact recreation 1

EPA Approval – April 2023 Letter Cont.

2022 TSWQS Revision

- Appendix B – Sole-source Surface Drinking Water Supplies
  - Added San Marcos River (1808) and Choke Canyon Reservoir (2118)
  - Removed Greenbelt Lake (0223) and Lake Brownwood (1418)

EPA Approval – April 2023 Letter Cont.

2022 TSWQS Revision

- Appendix E – Site-specific Toxic Criteria
  - Hurricane Creek (0604): copper WER for City of Lufkin
  - Added footnote 5 to identify site-specific criteria based on a biotic ligand model (BLM)
- Appendix G – Site-specific Recreational Uses and Criteria for Unclassified Water Bodies
  - South Lilly Creek (0409): secondary contact recreation 1

EPA Approval – August 2023 Letter

2022 TSWQS Revision

- Appendix E – Site-specific Toxic Criteria
  - Floyd Branch (0827): copper BLM for North Texas Municipal Water District facility

EPA Approval – October 2024 Letter

2014 TSWQS Revision

- Appendix A – Site-specific Uses and Criteria for Classified Segments
  - Wright Patman Lake (0302): pH 6.5-9.5
  - Lake Palestine (0605): pH 6.5-9.0
  - Cedar Creek Reservoir (0818): pH 6.5-9.0

2018 TSWQS Revision

- §307.6. Toxic Materials
  - Acute criterion for carbaryl in saltwater

EPA Action – November 2024 Letter

2014 TSWQS Revision: Appendix G – Site-specific Rec Uses

- EPA Approval
  - Indian Creek (1221): Secondary Contact Recreation 2
- EPA Disapproval (these remain PCR1)
  - Resley Creek (1221): Secondary Contact Recreation 2
  - South Leon River (1221): Secondary Contact Recreation 1

Items pending EPA action: 2010 TSWQS Revision

- Revised temperature criteria for reaches of two classified segments
- Revised dissolved mineral (i.e., TDS, SO4, Cl) criteria for 19 classified segments

Items pending EPA action: 2014 TSWQS Revision

- Revised ALU and/or DO criteria for five classified segments and four unclassified water bodies
- Revised dissolved mineral criteria for eight classified segments
- Revised pH criteria for three classified segments
- Revised segment boundary descriptions for six classified segments

Items pending EPA action: 2018 TSWQS Revision

- Toxic criteria for the protection of aquatic life
  - Acrolein: freshwater acute and chronic
  - Carbaryl: freshwater chronic
- Revised provision relating to nutrient assessment being based on multiple uses
- Revised recreational use for one classified segment and 26 unclassified water bodies
- Revised ALU and/or DO criteria for two unclassified water bodies

Items pending EPA action: 2022 TSWQS Revision

- Updates to Aquatic Life criteria (Table 1)
  - Cadmium: acute and chronic for freshwater and saltwater
- Updates to Human Health criteria (Table 2)
  - benzo(a)anthracene, benzo(a)pyrene, chrysene, 1,2-dichloropropane, 1,3-dichloropropene, dichloromethane, dicofol, and tetrachloroethylene
- Addition of geometric mean criterion of Enterococci for high saline inland waters with PCR2 (54 colonies per 100 mL)
- Revised ALU and/or DO criteria for three unclassified water bodies

2026 TSWQS Revision – Tentative Dates

- Preliminary public comment period in June 2024
- Workgroup meeting in March 2025
- Agenda date for proposal in November 2025
- Public hearing in January 2026
- Agenda date for adoption in May 2026

Current Projects of the Water Quality Standards Program

- Recreational Use-Attainability Analysis (RUAAs)
  - Ash Creek (0809B)
  - Dosier Creek (0809C)
  - Derrett Creek (0808D)
- Use-Attainability Analysis (UAAs)
  - Nichols Creek (0502A)
  - Hurricane Bayou (off Segment 0804)
  - Peach Creek (1803C)
- Special Studies
  - Development of an Index of Biotic Integrity for Tidal Streams of the Texas Coast, Phase 4
  - Development of a Multi-species Multi-nutrient Plankton Model for Texas Estuaries, Expansion into Matagorda and Baffin Bays
  - Research to develop salinity criteria

Questions?

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