

**Medina River WPP**  
**Work Group Meeting Notes**  
**July 30-31, 2024**

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July 30, 2024

## Ag & Urban Issues Work Group

### **LULC Updates Overview & Discussion**

- Recap of previous meeting input on methodology for estimating land use and land cover (LULC) changes over time.
- Used 2021 National Land Cover Dataset (NLCD) layer and considered approved subdivisions as a proxy for rate of change over time
  - Rate of growth increased considerably in mid 90s - Bexar Co
  - Rate of growth has even trajectory but with a couple big jumps - Medina Co
  - Rate of change assessment looked at subdivisions approved between 2000 and 2023
    - Applied rate of change to the LULC types to estimate the change in acres available for each population type (livestock, deer, hogs)
      - Resulted in lower projected loads over time
  - No info from Atascosa or Banderita County subdivisions obtained

### **Population Projection Updates Overview & Discussion**

- Recap of previous input on methodology for estimating population changes over time.
- Used Texas Demographic info – found to be very conservative
  - Considered Medina Valley ISD (MVISD) quarterly population projections - more analogous to Bexar Co growth
    - Results could still underestimated population growth
    - Updated watershed growth looks much more representative of what's actually happening
    - No qualms with updated growth rate applied
  - Rate of change in population applied to current loads in existing subbasin locations - no analysis of potential loads from future WWTFs in new locations or subbasins

### **Priority Areas and Management Measures**

- E.coli loads by subbasin were standardized by subbasin size: load/acre for management recommendation purposes. This compensates for differences in subbasin size in comparing overall loads.
  - Better illustrates loads in rural areas as opposed to urban
- Livestock & rural animal-based sources
  - Should compare livestock number requirements for ag valuations with appraisal districts against density in analysis
  - Subbasin 1 - doesn't have many livestock at all (few to no sheep/goats due to predators)
  - Other Livestock management measures not shown on slide could be included. Many practices not shown could be included in Conservation Plans or Water Quality Management Plans. For example:
    - Erosion control/grade structures
    - Nutrient management
  - White-tailed Deer
    - No additional ideas
  - Feral Hogs
    - No additional ideas

**Wastewater & Population-based sources**

- WWTFs
  - added Forest Glen 3 - new facility under construction, starting in 2026 (anticipated date in Public Utility Commission filing)
  - Medio Creek – load calculations used reported flows rather than permitted due to reuse obligations
    - All others used permitted maximum flow rates
    - Actual loadings are likely much less than permitted load
      - Analysis is a worst-case potential load – doesn't represent actual load
      - SAWS asked if WPP can include discussion of actual E. coli concentrations reported
        - Definitely acknowledge situation in WPP
    - No new management suggested
- OSSFS
  - Failure rates based on local feedback
  - Upper end of watershed has higher potential to directly impact ground water (Edwards outcrop & recharge zones)
  - Management Measures
    - Interest expressed for additional support for Authorized Agent capacity
    - Discuss enforcement in WPP
  - Application of high population growth to OSSF numbers may not be appropriate
    - New high-density growth may be more apt to be in subdivisions with WWTFs
      - May need to acknowledge this in WPP language
      - Bexar Co Authorized Agent was told 10 years ago that they wouldn't be permitting new OSSFs - they are actually permitting more systems than ever
- Dogs
  - No new thoughts on population increases or management
- Total Load from all identified sources
  - Predicted to increase 140% by 2036 due largely to population growth
    - Landscape based loads decrease; human population-based loads increase
  - When will area be fully built out?
    - Look at Alamo COG to see if they have planned that out
- Urban Stormwater
  - LID/Green Infrastructure needed for stormwater reduction
  - SARA Green Infrastructure Master Plan
    - Stormwater management best approach for addressing urban stormwater derived loads
    - Existing resources for diverse audiences in watershed
  - Operation and maintenance of these facilities is problematic
    - Need plenty of E&O to inform folks of these needs
  - Bexar Co does have rules/regs on stormwater implementation; HOA usually gets responsibility for maintaining stormwater features and they do a poor job in most cases
    - Works great when things work
    - Requires intensive training for landscapers/maintainers

- Bexar Co conducts helicopter surveillance of waterways annually to ID illicit discharge and works to reduce/eliminate those instances

#### Stream Restoration

- Great concept but does it create new/better wildlife habitat, which can actually increase E. coli loads
  - Highlights the issues of E. coli as a poor indicator of actual human health risks
- At end of day, could more beneficial than harmful
  - Prioritize high use locations such as parks
- Maybe some interest in long-term conservation easements
  - Speak to land trusts, COSA, EAA, Green Spaces Alliance
  - REPI program also active in area (JBSA-LAK; Camp Bullis too)
- Keep mention of EAA abandon well program in plan
- Bacteria Load Assessments
  - Noyes Rd. Large cattle feeding operation right along river that may be contributor (M&M Cattle)

#### Load Reduction Analysis

- Agreement that mid-range and low flow conditions are what should be the focus of planned management
- Use LDC reduction goals developed using data from 2024 Integrated Report, rather than long-term historical data

#### Next Stakeholder meeting

- End of August early September

July 31, 2024

## Education & Outreach Working Group

#### Review of population trends overview

- New projections seem more reasonable/appropriate than original numbers

#### Review of LULC and Development Trends

- All ok with those projections based on last 20 years growth rate

#### Messaging/Recruitment

- Thoughts?
  - What is on slides is good
- What it Means/What is promoted
  - Other thoughts?
    - Correcting dis- and mis-information that exists – watershed coordinator needs to understand what the misinformation is and where it's being spread, e.g. NextDoor
    - Keep tabs on what those topics are
    - Make points that environmental stewardship is everyone's responsibility
    - Hands on demonstrations and events make a big difference in reaching people

- Golf Course/Private Industry need information too on landscape & stormwater management
- City of New Braunfels has spot at local movie theater (Santikos) on watershed management
- City of San Antonio has video on trees and benefits they provide
- Local resources, such as YouTubers could be helpful
- SARA Bio Blitz is very popular
- How do you get people to want to do these things?
  - Should we target elected officials?
    - Educate on importance of conservation mindset
      - Work to get them to create influence on path forward, e.g. New ordinances; restrictions on approvals; etc.
  - Developers need to be exposed to concepts of developing with the environment in mind
  - Really need to highlight the importance of connecting with people where they are to provide information that they want and need (even if they don't know they need it)
- Promote responsible recreation
  - Pick up after yourself
  - Pick up after your critters
  - Don't overload the environment (love it to death)
- Monitor effectiveness of methods
  - What's working and what isn't
  - Make sure its adaptive
- Be sure to promote successes of program
  - Helps increase folks interest in the waterbody; desire to use; etc.
- Use presence of Medina River natural area
  - Staff tasked with providing educational programming
- Castroville Regional Park - decent birding community use
  - Signage opportunity?
- Incentives
  - Explore creation of a Medina River certified something - acknowledge doing the right thing
  - Promote the good works of folks

### **E&O Resources**

- New landowner info – what do they need to know
  - Grazing
  - OSSFs (types and their operation & maintenance)
  - Wildlife
  - Land stewardship
  - Financial/Technical resources
    - Talk with Jim Welch about what he needs as returning landowner
- Lawn & landscape information for subdivisions
  - Dog waste management
- LID maintenance training for landscapers
- Landlord/Tenant Farmer issues that don't support/promote conservation