



SPRING CREEK WATERSHED PARTNERSHIP

Agriculture, Wildlife and Invasives Workgroup Meeting Minutes

Tuesday, February 9th, 2020
1:00 – 3:00 p.m.

In Attendance:

Organizers:

Houston-Galveston Area Council (H-GAC):
Andrea Tantillo
Rachel Windham

Attendees:

Brian Koch (Texas State Soil and Water Conservation Board (TSSWCB))
Mac Martin (Texas A&M Forest Service)
Monte Parks (Harris County Precinct 4 (HCP4))
Teri MacArthur (The Woodlands Township)
Tom Douglas (Bayou Preservation Association (BPA))
Zach Rosen (Resource Environmental Solutions (RES))

Meeting Notes:

Outline and Statement of Purpose

- Rachel Windham (H-GAC) commenced the meeting at 1:00 p.m. by welcoming the attendees. Andrea Tantillo (H-GAC) reviewed Zoom Meeting platform functions for asking questions and making comments throughout the presentation. Attendance was recorded by the Zoom platform.
- Before starting the meeting, the agenda was discussed as well as a statement of purpose to focus the discussion around strategies for reducing fecal indicator bacteria (*E. coli*) impairments in the Spring Creek Watershed.

Model Results Review

- Ms. Windham refreshed the workgroup on the results of:

- Load duration curve analyses used to estimate the amount of bacteria reduction needed to comply with state water quality standards.
- Spatially explicit load estimation calculation tool (SELECT) analyses used to estimate the spatial distribution of sources leading to bacteria impairments and their contribution to the total estimated load.

Timeline and Reduction Targets

- Ms. Windham reviewed the concept of a milestone year or benchmark for determining the effectiveness of the watershed protection plan. The determination of the milestone year is at the discretion of the partnership and will determine the numerical targets for bacteria reduction. The partnership should select a milestone year based on a balance between model accuracy (which is less reliable with increased time) and time for implementation time (an allowance for improvement strategies to be carried out and gaged for efficacy).
 - Ms. Windham shared that the Human Sources and Pet Waste Workgroup made the case for setting the milestone year in 2030
 - Several workgroup members expressed interest in incorporating incremental check points of 5-year intervals in addition to the final milestone year point. In this way, overall load reduction would not have to be achieved by the first checkpoint, but progress and changes in bacteria source pressures could be reassessed to adapt partnership response over the following 5 years.
 - Tom Douglas (BPA) also suggests calculating percentage reduction targets for each of the check point years to help monitor progress.
- Ms. Windham also explained how reduction targets will be calculated for each source depending on the milestone year selection. Additionally, she explained the concept of representative units (i.e. the representative unit for pet waste = the waste of one dog which is estimated to be 2.5×10^9 cfu/day). Using representative units, it is easier to compare loads between individual sources. If the calculated reduction target for a particular source seems unattainable by the milestone year, there is also the option to make larger reductions to other, more easily controlled sources to compensate enough to reach the overall reduction target by the milestone year.

Water Quality Improvement Strategies

- Ms. Windham explained the goals of watershed improvement strategy selection are primarily to comply with state water quality standards, but also to collaborate

with existing efforts where possible, to find options with multiple benefits, to maintain cost effectiveness, and to work in a phased approach.

- Due to the focused nature of the workgroup, the following bacteria sources were discussed:
 - Agriculture

Strategies	Comments
<ul style="list-style-type: none"> ○ Promote and engage in existing agricultural programs ○ TSSWCB Water Quality Management Plans, USDA-NRCS Conservation Plans/Farm Bill programs ○ Restore and maintain riparian buffers ○ Develop manure composting program for non-agricultural horse waste 	<ul style="list-style-type: none"> ○ Focus on headwaters attainment area ○ Monte Parks (HCP4) points out that the Spring Creek Greenway trail is very popular for horse riding and could lead to a concentration of horse waste in riparian areas—this could be an area to focus on for education efforts

- Deer and Other Wildlife

Strategies	Comments
<ul style="list-style-type: none"> ○ Restore habitat away from riparian areas 	<ul style="list-style-type: none"> ○ Focus on headwaters attainment area ○ Wildlife waste load reduction target can be offset by overcompensating reductions from other sources (e.g. OSSFs) ○ Brian Koch (TSSWCB) asks if deer feeding is common in the watershed—Mr. Parks and Teri MacArthur (The Woodlands Township) confirm that it is. Mr. Koch points out that deer feeders are likely feeding feral hog populations too ○ Mr. Parks shares that the public also feed deer within the parks system to increase the chances of seeing them

- Feral Hogs

Strategies	Comments
<ul style="list-style-type: none"> ○ AgriLife education, technical services ○ Promote and engage in existing agency programs ○ Increase trapping and hunting of hogs 	<ul style="list-style-type: none"> ○ Watershed wide effort ○ Mr. Parks confirms that hogs are just as likely to be a problem on the downstream side of the watershed as they are in the more natural headwaters area, so efforts to reduce their impacts will be watershed wide

○ Conservation and Restoration

Strategies	Comments
<ul style="list-style-type: none"> ○ Promote and engage in existing conservation programs ○ Restore and maintain riparian buffers ○ Increase tree canopy 	<ul style="list-style-type: none"> ○ Focus on headwaters attainment area and along riparian buffers ○ Mac Martin (Texas A&M Forest Service) shares results from his analysis of a subset of the HUC 12 watersheds in the Spring Creek area using the iTree Hydro model which show how many millions of gallons of stormwater can be reduced based on increases in the amount of tree canopy ○ Mr. Parks notes that his tree planting facility is being upgraded to enhance tree growth and can work with Mr. Martin to identify areas that would benefit from plantings ○ In terms of increasing canopy in developed areas, Mr. Martin suggests targeting residential areas, supermarkets, business centers, and right-of-ways

○ Education and Outreach

Strategies	Comments
<ul style="list-style-type: none"> ○ Coordinate with efforts focused on: <ul style="list-style-type: none"> ▪ Pet waste ▪ OSSFs (homeowner 	<ul style="list-style-type: none"> ○ Watershed wide effort

education) <ul style="list-style-type: none"> ▪ Fats, oils, and grease ▪ Conservation/urban forestry ▪ Trash reduction ▪ Lawn maintenance ▪ Agricultural best management practices ▪ Stormwater pollution prevention 	
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○ Other Concerns

Strategies	Comments
Trash <ul style="list-style-type: none"> ○ Facilitate clean-up events Sedimentation <ul style="list-style-type: none"> ○ Restore and maintain riparian buffer Targeted Monitoring <ul style="list-style-type: none"> ○ Bacterial analysis ○ Site and condition specific monitoring Continue Partnership <ul style="list-style-type: none"> ○ Keep partnership active throughout implementation of WPP 	<ul style="list-style-type: none"> ○ Ms. MacArthur also points out raising awareness about invasive aquatic species (vegetation, zebra mussels) would be important to emphasize as additional stressors to waterways

Discussion, News and Questions

- Ms. Windham closes the meeting by asking workgroup members to consider who in the watershed might be best to contact regarding implementation efforts as well as other logistical considerations to be discussed in more depth at the follow up meeting on March 2nd.
- On behalf of Mr. Douglas, Ms. Tantillo promoted the Urban Riparian Symposium to be hosted virtually on February 10, 11 and 12

Meeting Adjourned at 3:00 p.m.

For more information, visit <http://springcreekpartnership.com>,
or contact Rachel Windham at:
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