

**WORKSHOP ITEM SUMMARY SHEET**  
**VILLAGE COUNCIL MEETING**  
**November 7, 2018**

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**Agenda Item:**

Estero River Maintenance

**Description:**

The Estero River is a mostly natural river/creek that runs through the center of Estero. The entire river/creek is located within the limits of the Village of Estero.

Some residents have expressed concern over the amount of sediment and debris that has accumulated in some areas of the river. Reasons given for concern are navigation and drainage. Sediment and debris could limit navigation in the river, especially during low tides. It could also reduce the drainage capacity of the river, potentially increasing water levels during high flow conditions.

The presentation is being provided to gain input from Council on their desire to move this project forward and investigate moving other funds to allow this project to be completed earlier than currently scheduled.

First steps for this project would include the following:

1. Advertise project
2. Select consultant
3. Bathymetric survey of the river to identify areas of sediment and debris accumulation.
4. Quantify impacts of sediment and debris on navigation and drainage
5. Assess conditions and provide recommendations
6. Investigate funding opportunities
7. Preliminary permit investigation

Estimated cost \$100,000 - \$150,000

Funds could be reallocated as follows to make those funds available:

- Use \$75,00 currently budgeted for River Maintenance
- Use \$82,600 still available in FY 18-19 Stormwater Maintenance Budget
- Total - \$157,600

- If additional funds are required, scale back water quality monitoring for FY 18-19 (budget \$100,000)

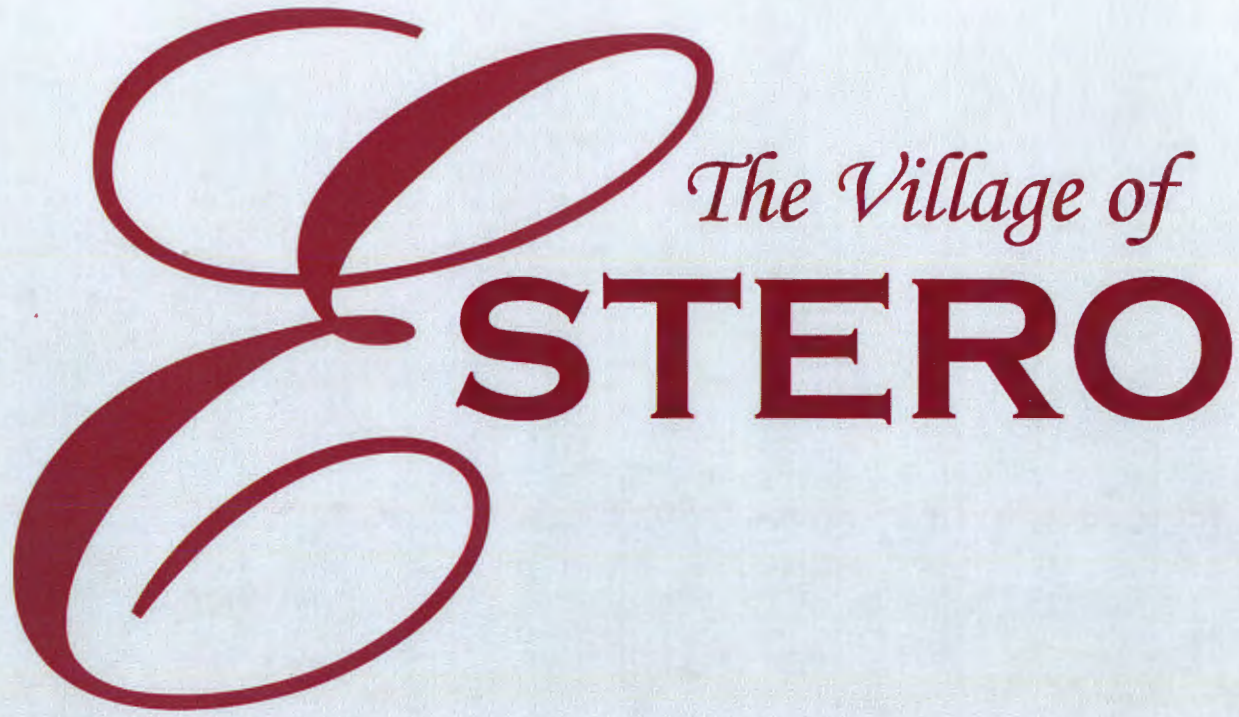
**Financial Impacts:**

No financial impact at this time. If Council decides to pursue additional maintenance activities on the Estero River additional funds will need to be budgeted for those activities.

The current Stormwater Maintenance budget includes \$430,920 after fiscal year 2022/2023 for the removal of sediment and debris from the Estero River. This project amount exceeds the current annual budget of \$400,000 for all stormwater maintenance activities.

**Attachments:**

1. Estero River Maintenance PowerPoint Presentation



# Estero River Maintenance

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David Willems, P.E.



# Outline

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- Background
- Existing Conditions
- Options



# Background

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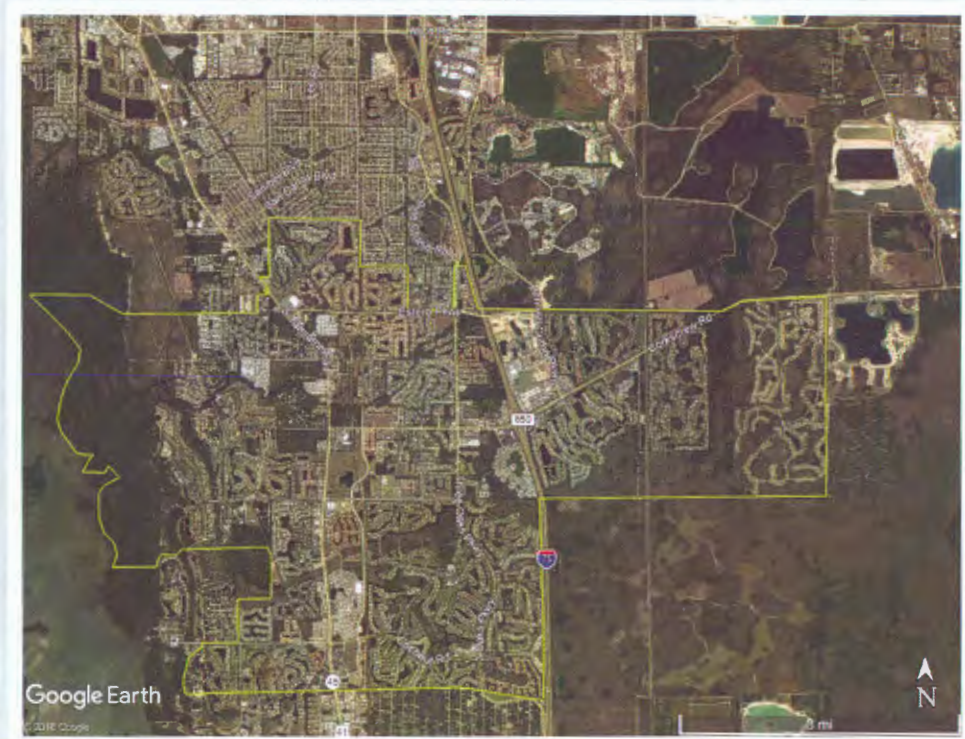
- Natural Creek – unmanaged
- Sediment transport is natural
- Has not been dredged in recent history (Lee County has removed debris)
- Runs through Estero Bay Aquatic Preserve





# Existing Conditions

- Development tends to increase sediment transport
- Sediment conditions
  - After Irma
  - Downstream
- Navigation
- Stormwater



# Existing Conditions

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# Existing Conditions

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# Existing Conditions

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Google Earth

# Options

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- Maintenance defines Estero River character
- No maintenance
- Selective sediment/debris removal
  - Study existing conditions
    - Bathymetric survey to document sediment
    - Identify areas of sediment
    - Coordinate with permitting agencies
    - Prepare design w/ cost estimate
  - Pursue maintenance, if deemed appropriate
- Extensive maintenance – likely not permissible



# Study Secondary Benefits

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- Provide baseline of River geometry
  - Understand future changes
  - Document movement of sediment
  - Justify future sediment removal
- Data used to improve stormwater model



# Current Budget

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- Estero River Maintenance - \$75,000 annually
- Estero River Sediment/Debris Removal - \$378,000 budgeted after FY22-23
- Fund study portion this year (est. \$150,000 - \$200,000)
  - Use \$75,000 river maintenance budget
  - Use the approx. \$82,600 still available in FY 18-19 Stormwater Maintenance Budget
  - Total = \$157,600
  - If additional funds are needed, scale back water quality monitoring (\$100,000 FY 18-19)



# Questions?

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