Waterway asset management system (WAMS)

for the Florida Fish and Wildlife Conservation Commission

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What is asset management?

Asset

An item, thing, or entity that has potential or actual value to an organization.

Asset management

Coordinated activities of an organization to realize value from assets over their life cycle in delivery of its objectives.

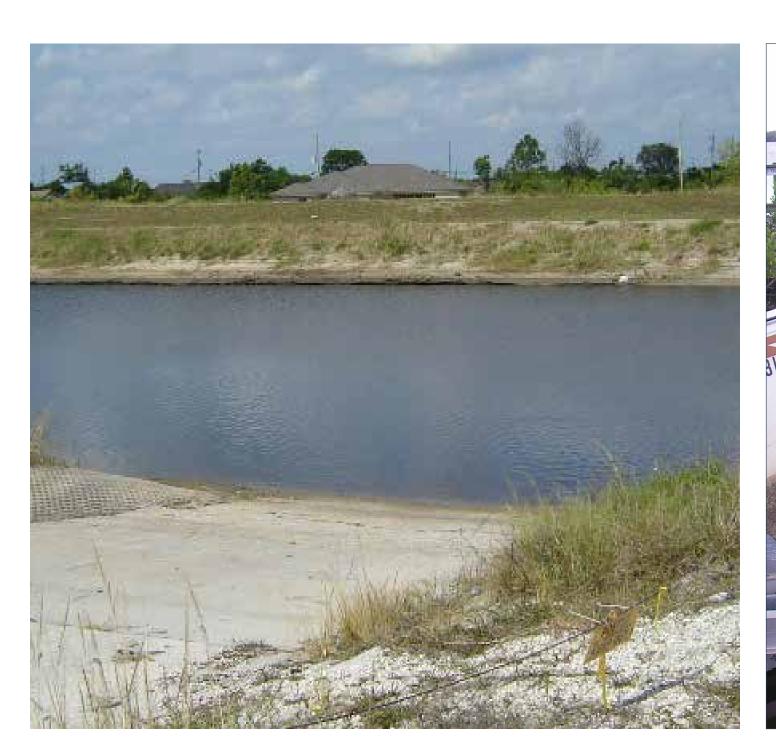
Asset management system

Set of interrelated elements of an organization to establish policies and objectives, and capabilities to achieve those objectives.

Asset management capabilities include people, resources, processes, information, and technology.

Waterway asset examples

- Channel markers
- Buoys
- Regulatory signs
- At-risk vessels
- Moorings
- Boat ramps
- Utilities
- Infrastructure



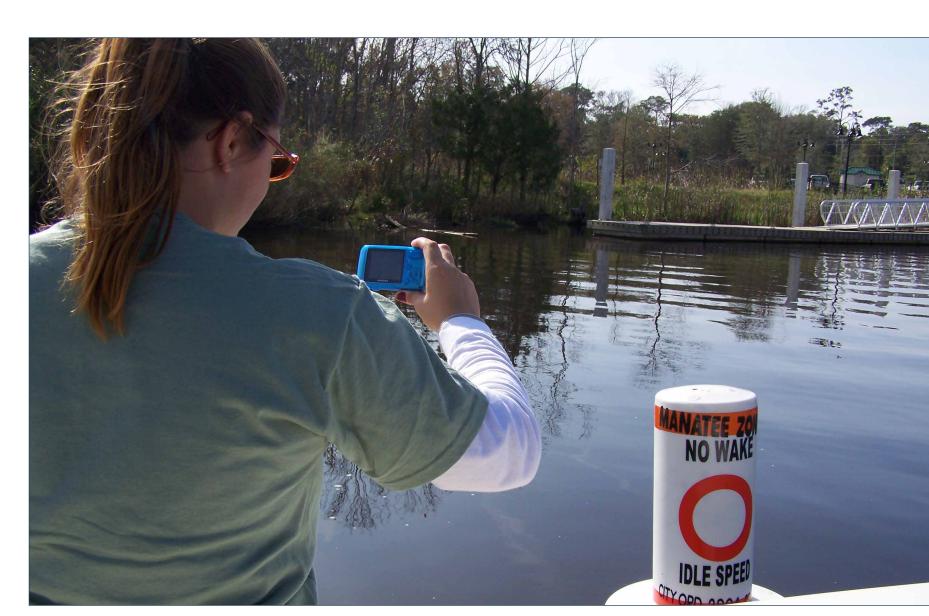
Bessie Creek ramp in Martin Co, FL



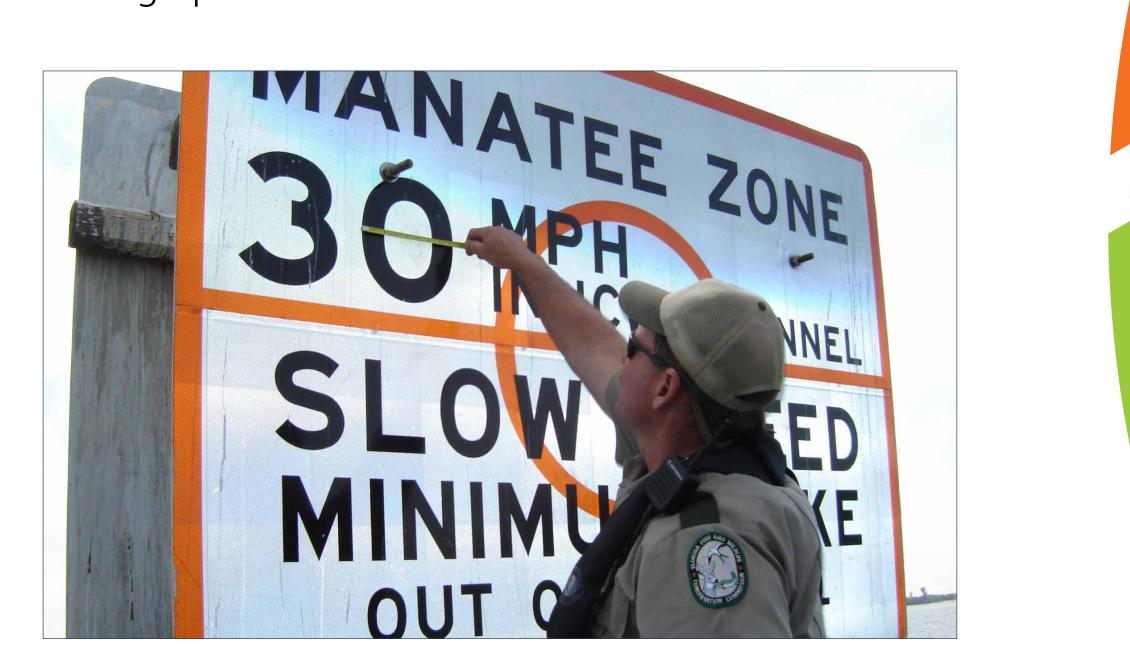
Derelict vessel removal in Brevard Co, FL



Mobile-GIS technology is used to collect asset data



Photographs of each asset are included



Asset details are housed in a digital record

Replacement of missing regulatory marker

Data entry forms contain radio buttons and pull-down values to simplify data entry and capture information, such as:

- Sub-meter accurate location data
- Current asset condition

Repairs

Vendors are selected through the

in the work plan.

State purchasing process to provide

marine construction services as described

The asset record is

completed repairs

updated to reflect all

- Active marker photos
- Recommended repair information

Data collection

The field data collection

application was created

to provided consistent

and uniform data

Interface provides platform for analysis used to:

- Repair existing assets
- Propose new assets
- Emergency responsiveness
- Confirm location appropriateness
- Generate annual work summary and material reports

Data is seamlessly transferred into

What is WAMS?

Geographic information system (GIS)-based data collection system used to increase the speed and ease of data collection and house waterway asset datasets.

Atkins worked with the Florida Fish & Wildlife to develop WAMS to assist with asset management.

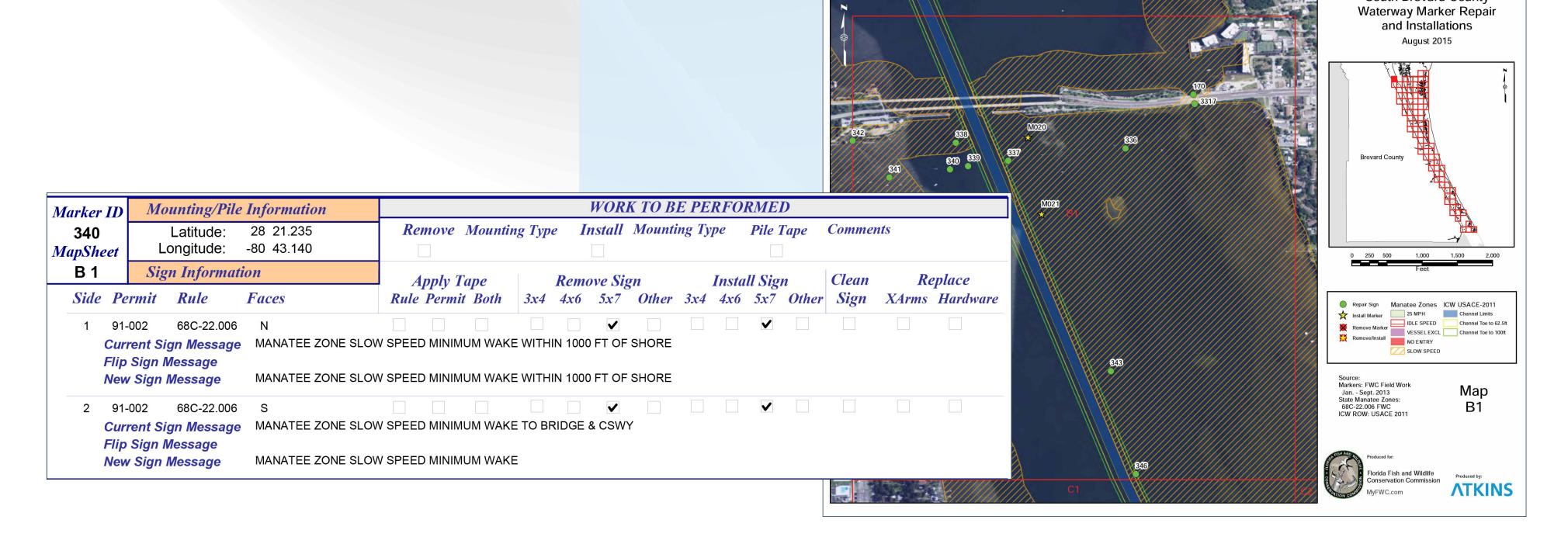
Interface

ESRI's ArcGIS platform

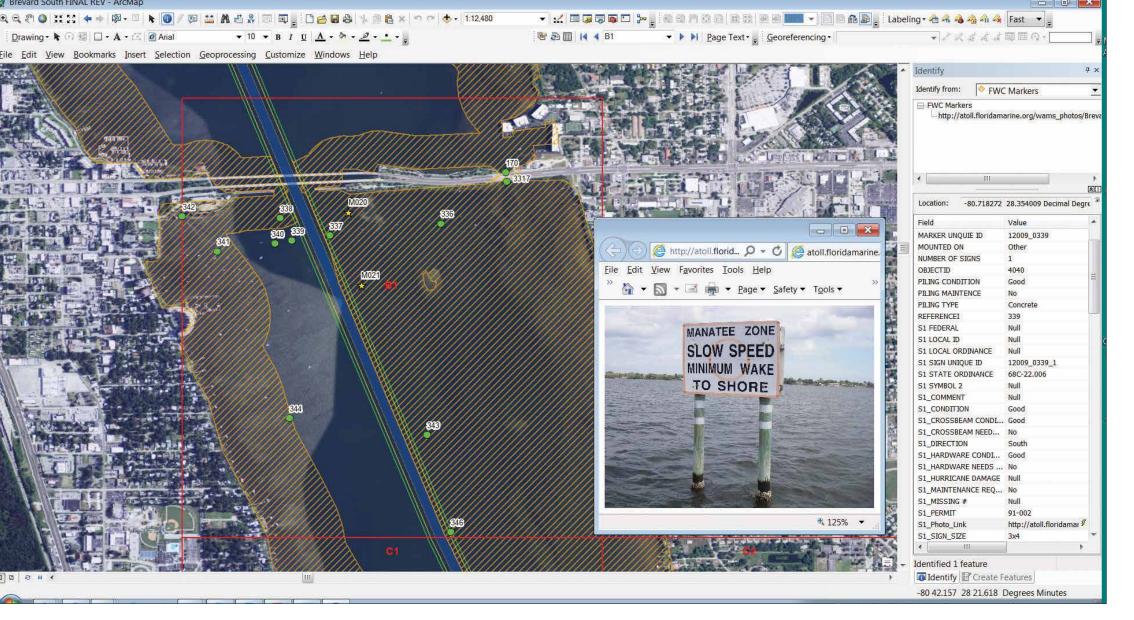
Work order

Detailed work plans are created for construction and repair

Analyzed data can be utilized to schedule regular, routine maintenance and repairs, and monitor permit compliance.



Work plan and corresponding map



ATKINS

Data collected in the field is analyzed back in the office

Active marker photo. Enables user to see the linked photograph of the geographic feature in the editing panel.

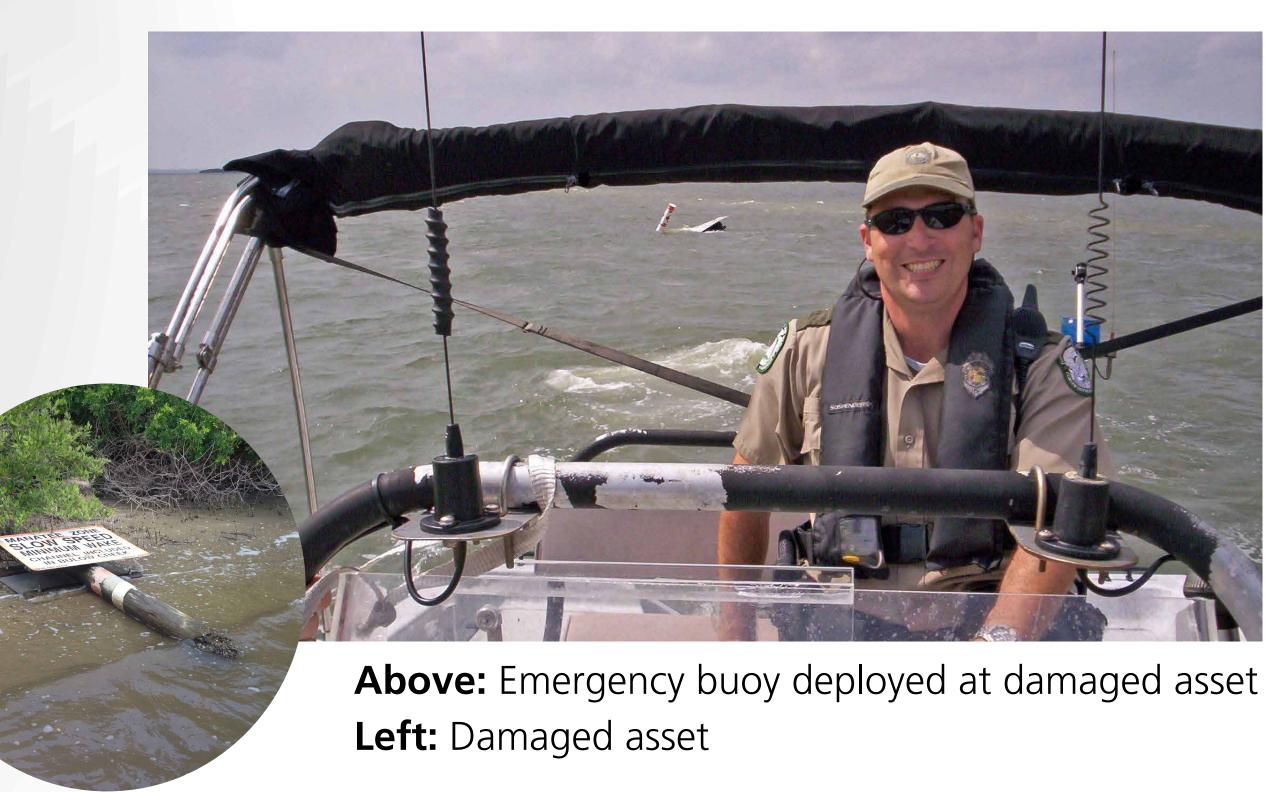
Active record flagging

Visualize the active record on the map when multiple features are selected.

Reporting engine

Select features on the map via predefined or user-defined complex queries.

Emergency response



On-call response program

Provides rapid assessment and repair of damaged or missing waterway markers.

Emergency response program

Provides for post-disaster response pertaining to FWC waterway assets.

