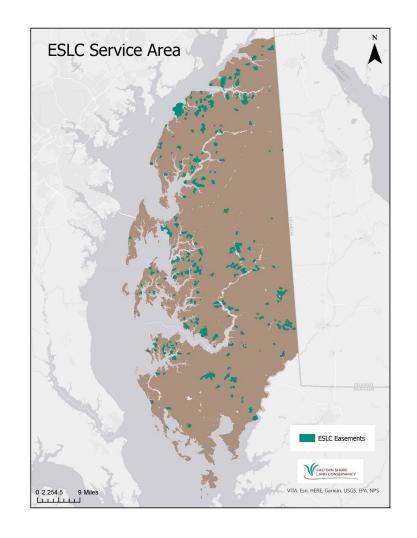
# Let's Talk Monitoring...

Lessons Learned by Eastern Shore Land Conservancy



### **A Brief Overview of ESLC**

- Located in Easton, Talbot County
- 11 Full-Time Staff (3 Land Staff)
- Six-County Service Area
- Over 63,000 Acres Protected
- Three Preserves One Public Access
- 309 Easements (and counting!)



# **Our Land Team**



Steve Kline President



**Dave Satterfield Land Program Manager** 



Larisa Prezioso
Conservation Specialist



Michael Dunmyer Stewardship Specialist

# **Two Stress Tests for Stewardship:**

### **Staffing Shortages**

- Funding
- Volunteers
- Covid-19

### **Staff Turnover**

- Onboarding
- Knowledge Loss





**Mobile Apps** 



**Drones** 



**Summary Sheets** 



**Mobile Apps** 



**Drones** 



**Summary Sheets** 

# **Summary Sheets**

- Ditch bulky field files for clear,
   replaceable one-page references
- What do monitors need to know?
  - Property description, location
  - Landowner contact info
  - Current conditions / structures
  - Other key restrictions (buffers)



#### STEWARD FIELD REFERENCE

EAS.DOR.12

15 Railroad Avenue | East New Market, MD 21631 Approx. 9.6 total acres | 6 open space, 3 forested

<u>Grantors</u>: Commissioners of East New Market <u>Current Owners</u>: Same as grantors <u>Town Office</u>: (410) 943-8112

#### **Existing Structures:**

Playground and Pavilion Various Seating Areas Walking Path with Signage

#### **Permitted Structures:**

Structures and Signage for Public Enjoyment
Office for Park Staff
Agricultural/Management Structures
Fencing and Means of Access

#### **Sensitive Areas:**

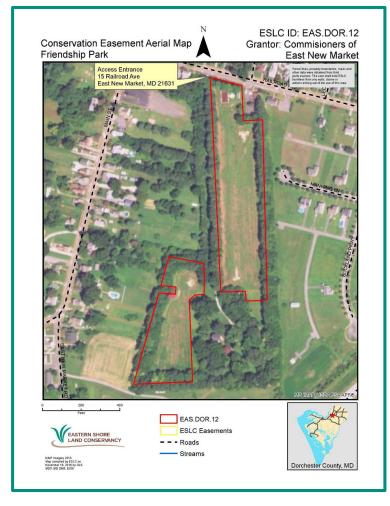
Note any damage to forests or wetlands Note any concerns regarding public use

#### Keep an Eye Out For:

Changes in how the property is used New billboards, signs, or advertisements Dumping of soil, debris, equipment, trash, etc. Excavation, dredging, or mining

# **Summary Sheets**

- Ditch bulky field files for clear, replaceable one-page references
- What do monitors need to know?
  - Property description, location
  - Landowner contact info
  - Current conditions / structures
  - Other key restrictions (buffers)





#### STEWARD FIELD REFERENCE

EAS.DOR.12

15 Railroad Avenue | East New Market, MD 21631 Approx. 9.6 total acres | 6 open space, 3 forested

<u>Grantors</u>: Commissioners of East New Market <u>Current Owners</u>: Same as grantors <u>Town Office</u>: (410) 943-8112

#### **Existing Structures:**

Playground and Pavilion Various Seating Areas Walking Path with Signage

#### **Permitted Structures:**

Structures and Signage for Public Enjoyment
Office for Park Staff
Agricultural/Management Structures
Fencing and Means of Access

#### **Sensitive Areas:**

Note any damage to forests or wetlands Note any concerns regarding public use

#### Keep an Eye Out For:

Changes in how the property is used
New billboards, signs, or advertisements
Dumping of soil, debris, equipment, trash, etc.
Excavation, dredging, or mining

Conservation Easement Aerial Map Friendship Park

ESLC ID: EAS.DOR.12 Grantor: Commisioners of East New Market







UP imagery 2015 up compiled by ESLC on ovember 16, 2016 by DLS DP, MD DNR, ESRI





**Mobile Apps** 



**Drones** 



**Summary Sheets** 

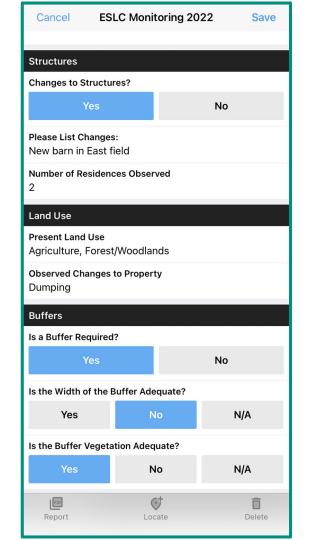
# **Monitoring on Mobile**

- Incorporates summary information
- Removes steps from report writing process
- Limits monitoring equipment needs
- Provides up-to-date view of progress
- Pictured: Fulcrum (~\$400 per user annually)



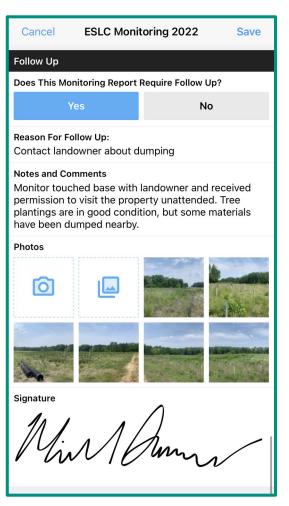
# **Monitoring on Mobile**

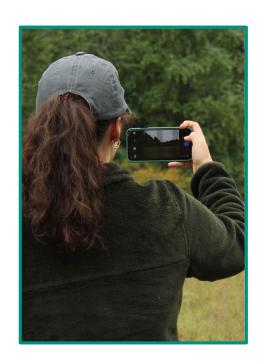
- Incorporates summary information
- Removes steps from report writing process
- Limits monitoring equipment needs
- Provides up-to-date view of progress
- Pictured: Fulcrum (~\$400 per user annually)



# **Monitoring on Mobile**

- Incorporates summary information
- Removes steps from report writing process
- Limits monitoring equipment needs
- Provides up-to-date view of progress
- Pictured: Fulcrum (~\$400 per user annually)





**Mobile Apps** 



**Drones** 



**Summary Sheets** 









# **Diverse Benefits for the Entire Organization**



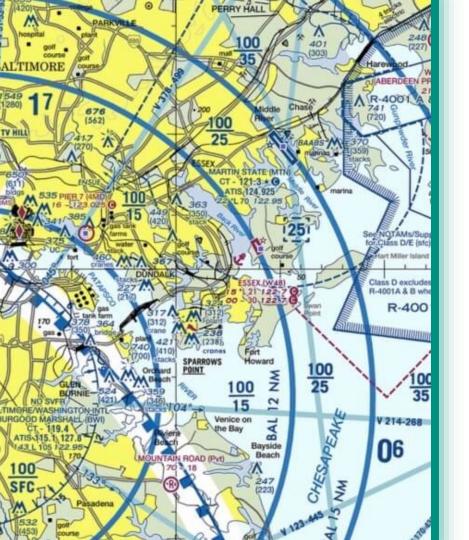


**Stewardship:** substantial improvements to quality and efficiency of monitoring

**Conservation:** faster site visits and higher-quality baseline documentation

**Communications:** near-endless supply of current, high-resolution content for outreach

**Advancement:** aerial property photos for donors and easement landowners



# Registration and Certification

- Drone registration and pilot licensure required by FAA for commercial uses (\$10)
- Licensing includes testing,
   available at Navy Annapolis
   Flight Center (\$160)
- Bi-annual online recertification

# **ESLC's Hardware**

Keep Maryland

BEAUTIFUL

- DJI Mavic 2 Pro (and Fly More Bundle)
- Priorities: flight time, safety features
- Must-Have Accessories:
  - DJI Smart Controller (or equivalent)
  - Extra Batteries and Propellers
  - Landing Gear or Landing Pad
- ❖ Total Cost: ~\$3000 per drone



# **Purchasing in 2022**







Mini SE ~\$500

Mini 3 Pro ~\$1500

Mavic 3 ~\$3000

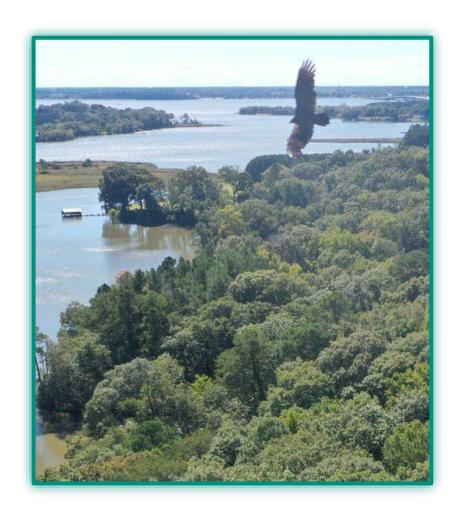
- Good first drone
- Best for smaller properties

- Best flight time
- Great image & video quality

- Best flight range
- Best image & video quality

### **Limitations of Drone Use**

- Airspace restrictions
- Visibility through canopies
- Nuisance to wildlife / hunters
- Landowner receptiveness
- Liability for your flight
- Ongoing maintenance costs
- Burdensome image file sizes





**Mobile Apps** 



**Drones** 



**Summary Sheets** 

