



Photography for ESC and SW Inspectors

3 CH



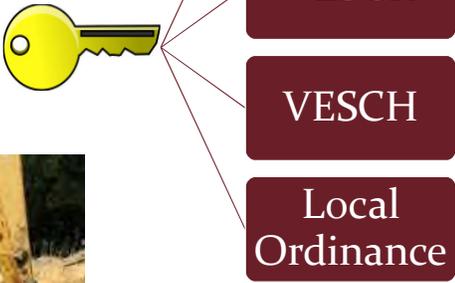
Photography for Inspectors

1. **(Permanent) Photo Points**
2. **(Alleged) Violations**



Inspections

Inspections are the key to an effective ESC Program!



- VESCL
- VESCR
- VESCH
- Local Ordinance

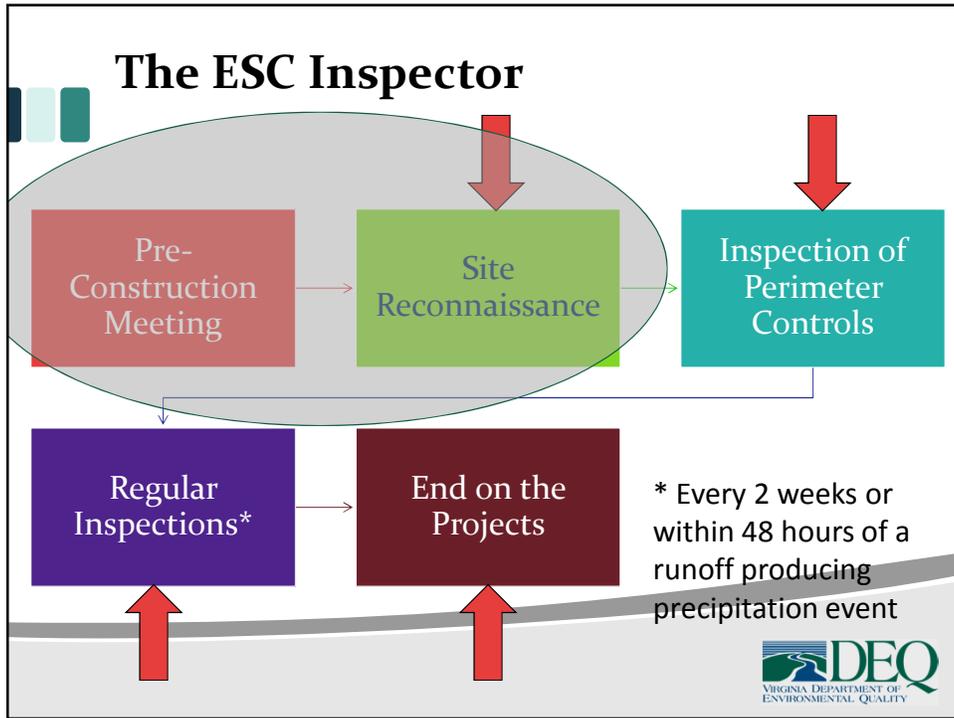


An Effective Inspection Program

An inspector must:

- Posses an understanding of the rules established by state law, the regulations and the local ordinance
- Organize a system to implement those rules effectively





SW Inspector

- Critical role!
- Ensures compliance with:
 - Construction GP
 - ESC Regulations
 - VSMP Regulations
- Protects natural resources



SW Inspections

- VSMP authority inspections during construction
- **Periodically** inspect LDA for:
 - Compliance with approved ESC plan
 - Compliance with approved SWM plan
 - Development, updating, and implementation of P2 plan
 - Development and implementation of any additional control measures necessary to address a TMDL



SW Inspections

- VSMP authority inspections after construction
 - Inspect stormwater management facilities at least once every 5 years
 - May use inspection reports from owner if conducted by authorized person



Documenting Photos & Photo Points on Plat

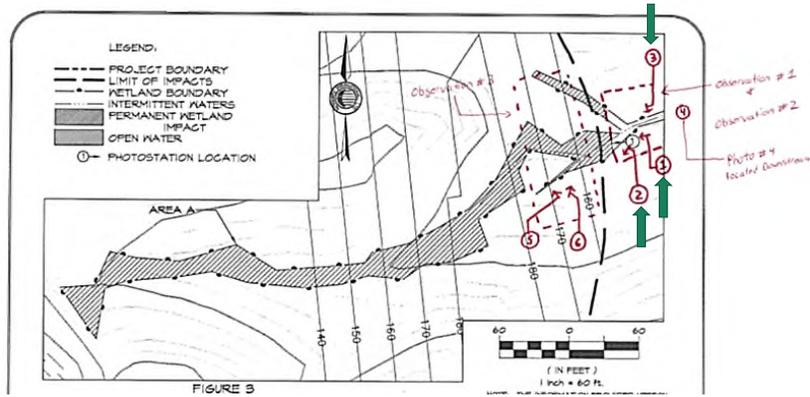
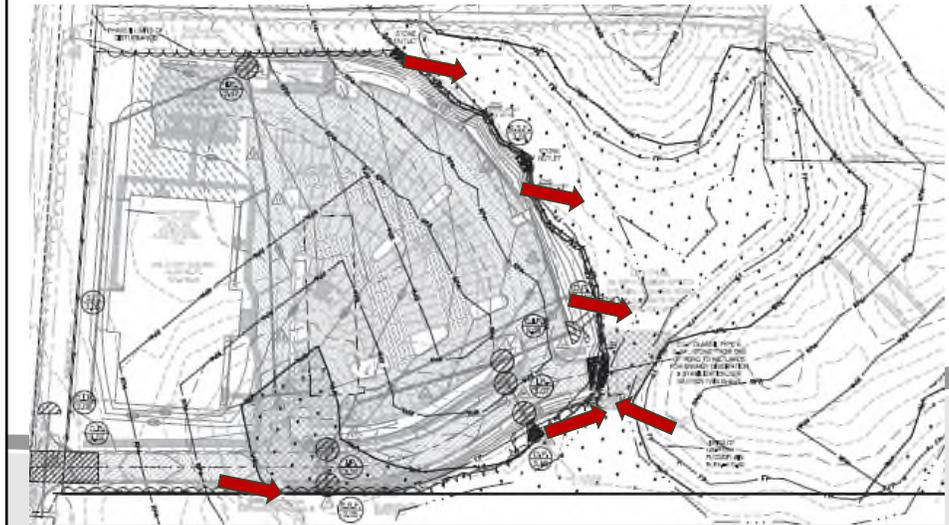


Photo station 1 = west corner of project looking east
 Photo station 2 = west corner of project looking southeast
 Photo station 3 = northwest corner of project looking south



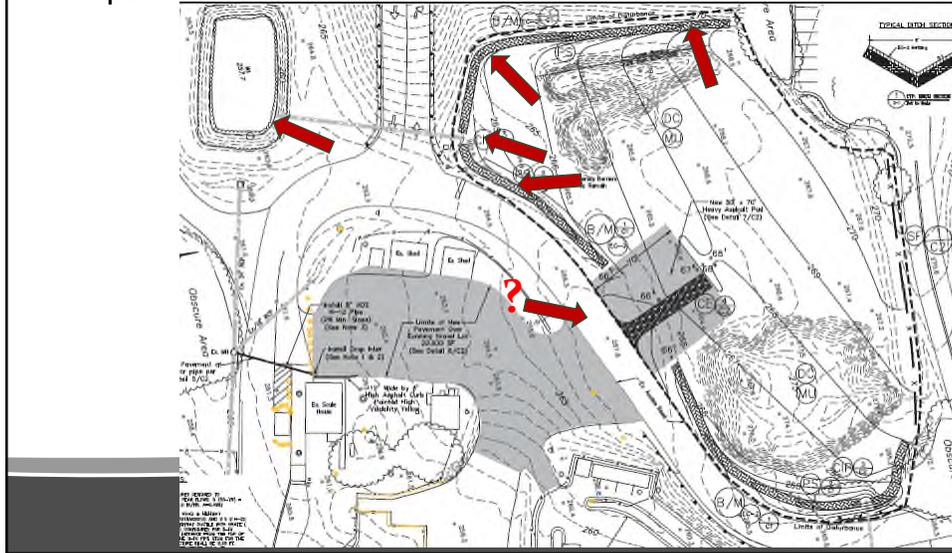
Choosing Permanent Photo Points

Where would we want to place permanent photo points?



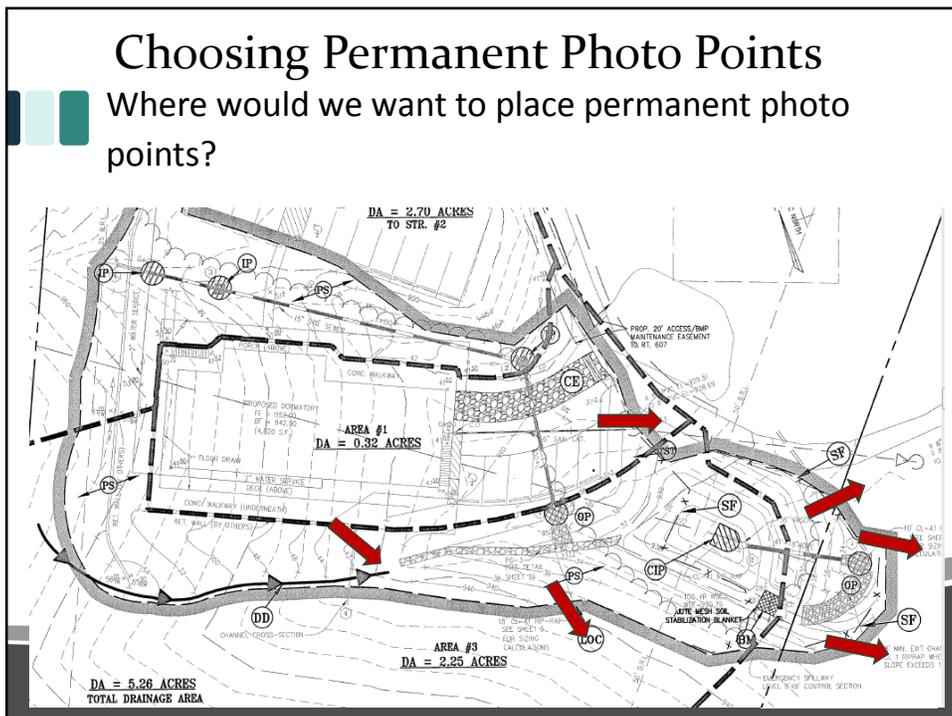
Choosing Permanent Photo Points

Where would we want to place permanent photo points?



Choosing Permanent Photo Points

Where would we want to place permanent photo points?



Why Take Photographs?

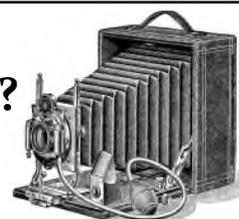


- Take before photographs to assess impacts of potential violations
- Take pictures of environmentally sensitive areas, adjacent areas, downstream areas
- Take photographs of conditions after final stabilization



ESC

Pre-Construction Meeting?



1. Walk the perimeter
2. Make sure that adjacent & down gradient “potential impact areas” (i.e. wetlands and streams) are marked
3. Make sure that buffers are marked
4. Are on-site to be protected areas (i.e. infiltration areas, wetlands and buffers) marked
5. Take before photographs of all these areas



End of Construction



Before → After



Types of Inspections

1. Initial installation of perimeter controls
2. Regular inspections (possible complaint driven inspections)
3. Project completion. Inspection before release of surety



Taking Photographs of Alleged Violations



- Enforcement/Court action may take a long time and situation in the field may change
- Enforcement action may be more effective with photographic evidence
- Hopefully you have taken before photographs so you (and the judge) can assess impacts of potential violations



Taking Photographs of Alleged Violations

Things to remember:

- Keep the original photograph
- You can:
 - Crop
 - Edit
 - Leave instruction for land disturber
- But, do not show up in court with only the edited versions



Taking Photographs of Alleged Violations

Things to remember:

- Keep the original photograph



Taking Photographs of Alleged Violations

Things to remember:

- Keep the original photograph → in court:



Taking Photographs of Alleged Violations

Things to remember:

- Keep the original photograph



Taking Photographs of Alleged Violations



Taking Photographs of Alleged Violations



Taking Photographs of Alleged Violations



Concrete Washout



Taking Photographs of Alleged Violations

Concrete Washout



Taking Photographs of Alleged Violations

Concrete Washout



Taking Photographs of Alleged Violations

Concrete Washout



Taking Photographs of Alleged Violations

?



Taking Photographs of Alleged Violations



But that picture could have been taken anywhere



Taking Photographs of Alleged Violations

Photo taken March 3, 2016
Precipitation in the area since March 1 = 0.9 inches
Time for a bioretention area to drain = 2 days



Taking Photographs of Alleged Violations



Taking Photographs of Alleged Violations



Caution!

- Use references
 - Choose wisely
 - Do not incriminate
- When shooting video watch your language
 - Do not incriminate



What do you use to take photos with?

- Digital SLR?
- Digital Compact (point and shoot)?
- Cell Phone?
- Video?
- Film?
- Other?



APPS.

Android Apps = IOS apps

- HDR Camera 
- Evernote (Skitch)
- Lightroom (\$) (Adobe) 
- Snapseed (Google)
- Surveyor Tools 
- GPS Map Camera 



HDR



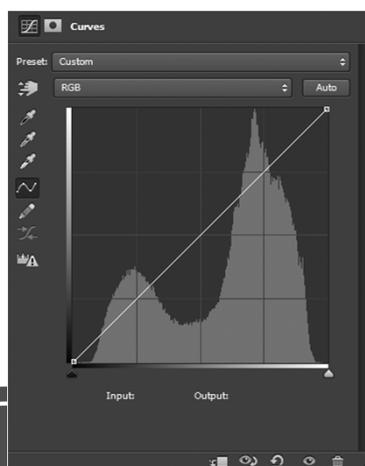
Editing adjustments (Snapseed)

- Brightness
- Contrast
- Saturation
- Ambiance
- Shadows
- Highlights
- Warmth
- Other specialized edits

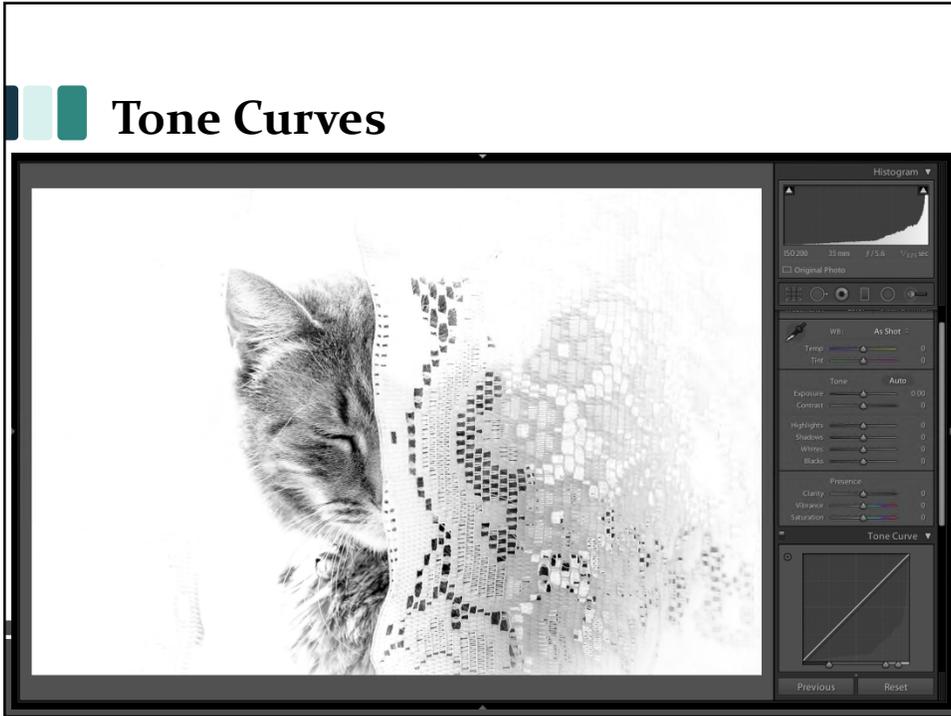


Editing adjustments (Lightroom \$\$)

Some of the same, but also tone curve.

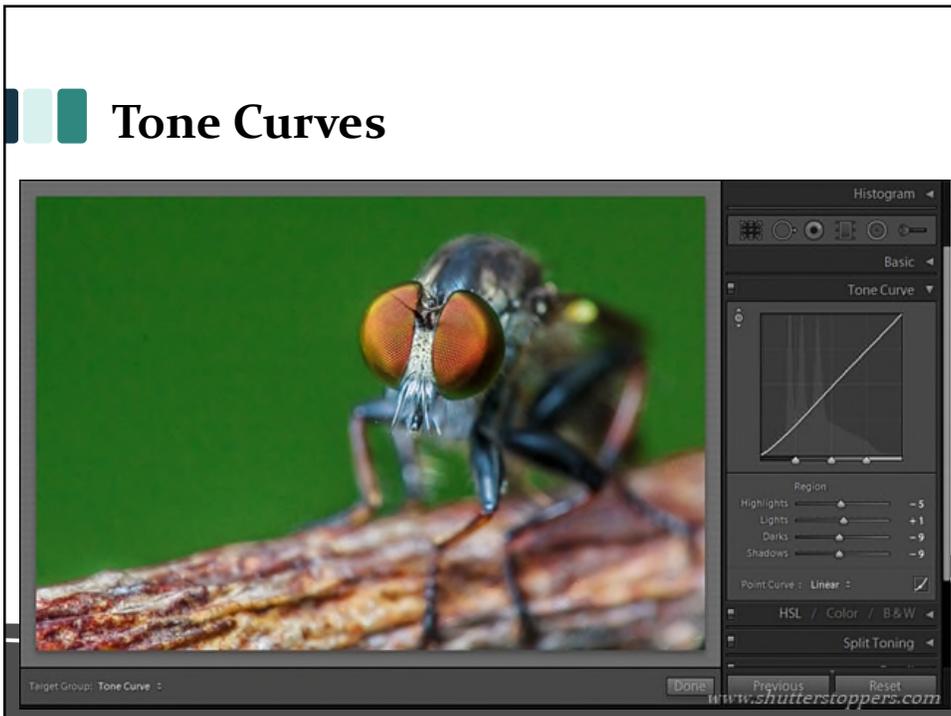


Tone Curves

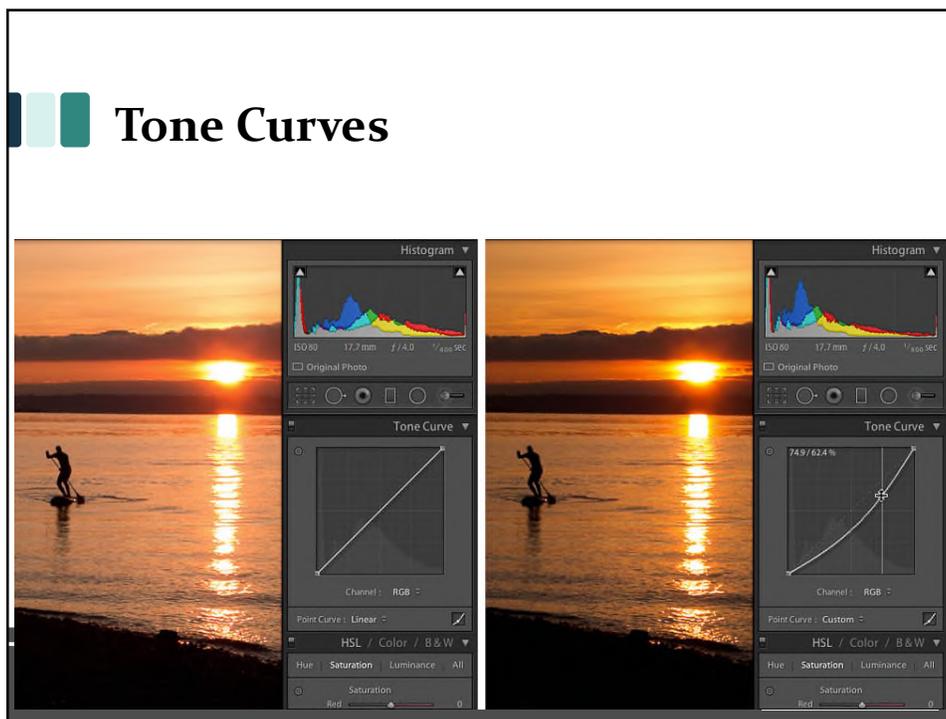


This screenshot shows the Adobe Photoshop interface with the Tone Curve panel open. The main image is a black and white photograph of a kitten's face. The Tone Curve panel on the right is set to 'As Shot' and shows a linear curve. The panel includes sections for 'Temp', 'Tint', 'Tone' (with sliders for Exposure, Contrast, Highlights, Shadows, Whites, Blacks), and 'Presence' (with sliders for Clarity, Vibrance, Saturation). The Histogram is visible at the top right of the panel.

Tone Curves



This screenshot shows the Adobe Photoshop interface with the Tone Curve panel open. The main image is a color photograph of a fly on a twig. The Tone Curve panel on the right is set to 'Basic' and shows a linear curve. The panel includes sections for 'Region' (with sliders for Highlights, Lights, Darks, Shadows) and 'Point Curve' (set to 'Linear'). The Histogram is visible at the top right of the panel. The URL 'www.shutterstoppers.com' is visible at the bottom right of the interface.



Again!

Editing:

- Great for personal use
- Great for reports
- Great to get a point across
- **Not** so great in court → save edited photos under a different file name and save the originals ... *and take better photos that don't require editing!*

The logo for the Virginia Department of Environmental Quality (DEQ) is located in the bottom right corner of the slide. It features a stylized green and blue graphic of a river and mountains, with the text 'DEQ' in large green letters and 'VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY' in smaller green letters below it.

