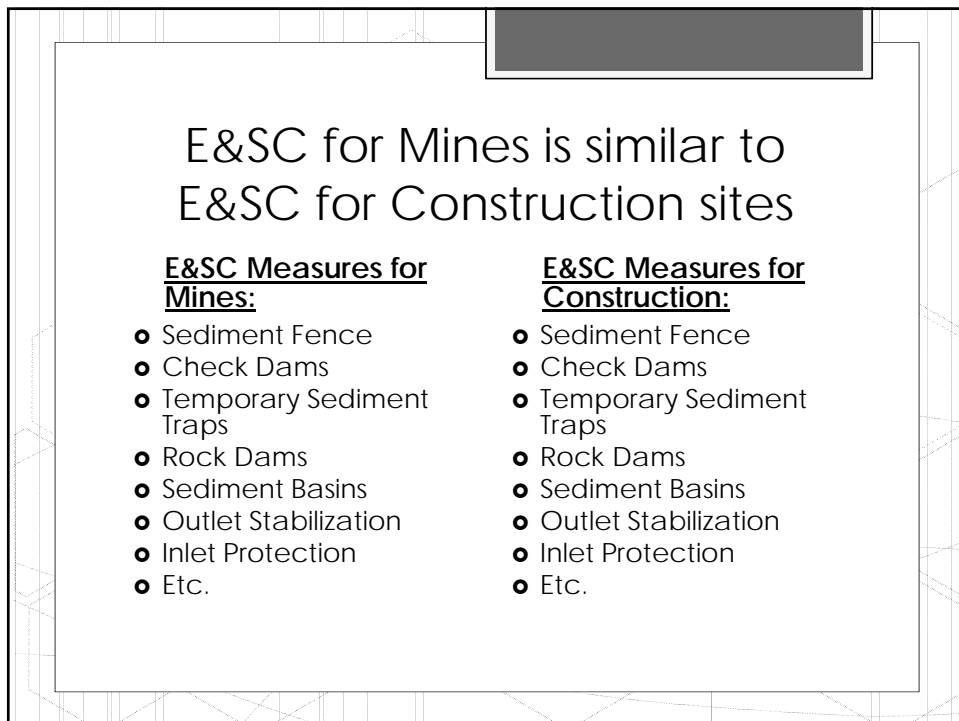


Erosion and Sedimentation Control on Mine Sites

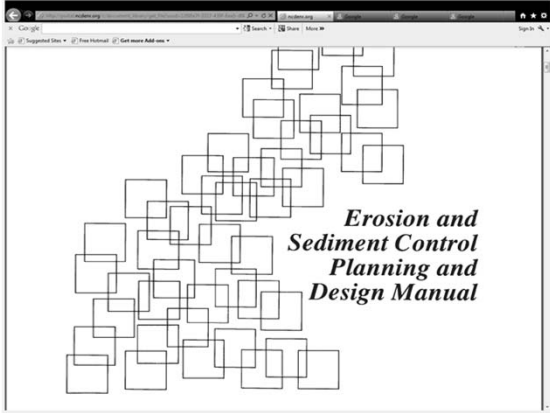
Janet S. Boyer, PE, CPM
State Mining Specialist
NC DENR - DEMLR



E&SC for Mines is similar to E&SC for Construction sites


<p><u>E&SC Measures for Mines:</u></p> <ul style="list-style-type: none">● Sediment Fence● Check Dams● Temporary Sediment Traps● Rock Dams● Sediment Basins● Outlet Stabilization● Inlet Protection● Etc.	<p><u>E&SC Measures for Construction:</u></p> <ul style="list-style-type: none">● Sediment Fence● Check Dams● Temporary Sediment Traps● Rock Dams● Sediment Basins● Outlet Stabilization● Inlet Protection● Etc.
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Mines Use the Same Design Criteria



The image shows a screenshot of a web browser window. The browser's address bar contains the URL "http://www.ars-ng.com". The page content features a graphic of a staircase made of overlapping squares, with the text "Erosion and Sediment Control Planning and Design Manual" overlaid on the right side of the graphic.

It's the same...but different



A black and white photograph of two identical-looking babies. Both babies are wearing light-colored, textured knit hats with pom-poms. They are both holding pacifiers in their mouths and looking towards the camera.

So what's different?

- The length of the project
- How buffers are used for sediment control
- How wetland buffers are treated
- Measures may be designed differently
- Bonding
- Stormwater permits are different

Length of Time Project is Active

Mines - Decades



Construction -Months



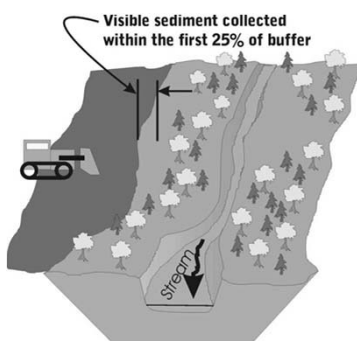
Design Criteria

- Mines:
- Permanent (greater than 1 year) – must dewater from the surface
- Design for 25 year/24 hour storm event

- Construction:
- Temporary

How are Buffers Treated?

- Mine buffers may not be used as a measure
- Construction buffers may use the first 25% to collect sediment



Mine Buffers

Unexcavated:

- May be used along adjoining property
- May include roads, berms, stockpiles
- May **not** be used along streams or wetlands

Undisturbed:

- Used to protect streams and wetlands
- May **not** be disturbed
- May **not** include roads, berms, stockpiles

Wetland Buffers

Mines:

- Minimum of 50 feet undisturbed buffer

Construction:

- May be less than 50 feet

Measures May Be Designed Differently



- Mining Program will review innovative practices such as stone baffles
- Mines often build berms

Bonding

- Reclamation bond is calculated for each permitted mine site
- Bond is returned when the site is "released"
- Final grading and vegetation must be established prior to release

Stormwater Permits

Mines

- NCG02 (renewal 2014)
- Must send Notice of Intent and Fee

Construction

- NCG01
- Issued with plan approval

E&SC at Mine Sites

- Permanent
- Buffers cannot be used as measure
- Minimum 50 ft wetland buffer
- Measure Designs (porous baffles)
- Bonding
- Stormwater Permits



It's the same, but different



Questions?



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