

Facing upstream at confluence with Tributary
to Meeting of the Waters at UNC Pinetum



LOWER MORGAN CREEK GROUP

The Bad

Confluence of Unnamed Tributary and Meeting of the Waters at UNC Pinetum

Obvious gray discoloration of water

Source was investigated by Sharon Myer and her staff and found to be a illicit discharge from a laundry facility at UNC Hospital

Measures under way to correct problem

**M6a. DOT construction site on US 15-501 at
Wilson Creek– Chapel Hill (during rain)**



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Wilson Creek at US 15-501

Poor stormwater control at DOT construction site

Obvious erosion of topsoil

Visible turbidity in runoff

Source of sediment deposition to Wilson Creek



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Toms Creek behind Willow Creek Shopping Plaza off Hwy 54 Bypass

Significant bank erosion

Exposed roots indicate that bank erosion may be ongoing

High bank indicates stream may be incised at this location



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Toms Creek behind Willow Creek Shopping Plaza off Hwy 54 Bypass

Bedrock substrate maintains grade control which has prevented stream from incising

Right bank low – flood plain readily accessible during storm flow events

Riparian buffers intact

Some sections are good example of step-pool stream type

M4. Morgan Creek at Ashe Ave. – Chapel Hill (upstream)



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Morgan Creek at Ashe Ave. – Chapel Hill

Buffers intact – alluvial valley heavily forested through this section (despite surrounding suburban community)

Floodplain immediately accessible off right bank (not visible in photo)

Photo taken in meander bend indicative of good stream pattern in this area

**Meeting of the
Waters Creek in
the Pinetum**



SM

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Meeting of the Waters in UNC Pinetum

Rocky substrate helps maintain grade control in this section, which has prevented stream from incising

Banks low – flood plain readily accessible during storm flow events

Preservation of Pinetum insures that riparian buffers remain intact

Some sections are good example of step-pool stream type (including the section in the photo)

Highly valuable open space/habitat near urban center



Relatively Intact; Edge of Adam's Property

LITTLE/BOLIN CREEK GROUP

The Good

Tributary to Bolin Creek at edge of Adams Property

Floodplain appears readily accessible – stream not incised

Riparian buffer intact and extensive



Undisturbed Reach

LITTLE/BOLIN CREEK GROUP

The Good

Bolin Creek at Claymore Rd.

Floodplain appears accessible – stream not likely to be incised

Riparian buffer intact and extensive

Extensive mid-age to mature hardwood forest in riparian zone – good habitat

Photo taken in meander bend indicative of good stream pattern in this area



View of Creek

LITTLE/BOLIN CREEK GROUP

The Good

Phils Creek at Greensboro Road (not actually in Little/Bolin Creek watershed)

Floodplain appears accessible – stream not likely to be incised

Meander bend in photo indicative of good stream pattern in this area

Riparian buffer intact and extensive (not clearly visible in photo).

Extensive portions of alluvial valley covered with mature hardwood forest in this area



Tributary to Morgan Creek; Alluvial Deposits

LITTLE/BOLIN CREEK GROUP

The Bad

Tributary to Morgan Creek at Smith Level Road (not actually in Little/Bolin Creek watershed)

Stream segment straightened

Riparian vegetation removed

Sediment deposits in stream bed

Stream banks artificially hardened



LITTLE/BOLIN CREEK GROUP

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Tributary to Little Creek at Chapel Hill Golf Course

Riparian vegetation removed and regularly disturbed (mowed)

Algae and/or aquatic macrophyte growth in still section indicates strong potential for nutrient over-enrichment

Banks eroded (not shown in photo)

Stream likely to be incised in some sections



Severe erosion of steep of very high, steep embankment below residential structures with very narrow buffer.

LITTLE/BOLIN CREEK GROUP

The Bad

Bolin Creek at Bollingwood

Severe bank erosion – prime example of slope failure

High steep bank – stream may be incised in this area

Narrow riparian buffer – encroachment by structures

M8. Prices Creek - Cypress Grove upstream of Damascus Church Rd. above University Lake



UPPER MORGAN CREEK GROUP

The Good

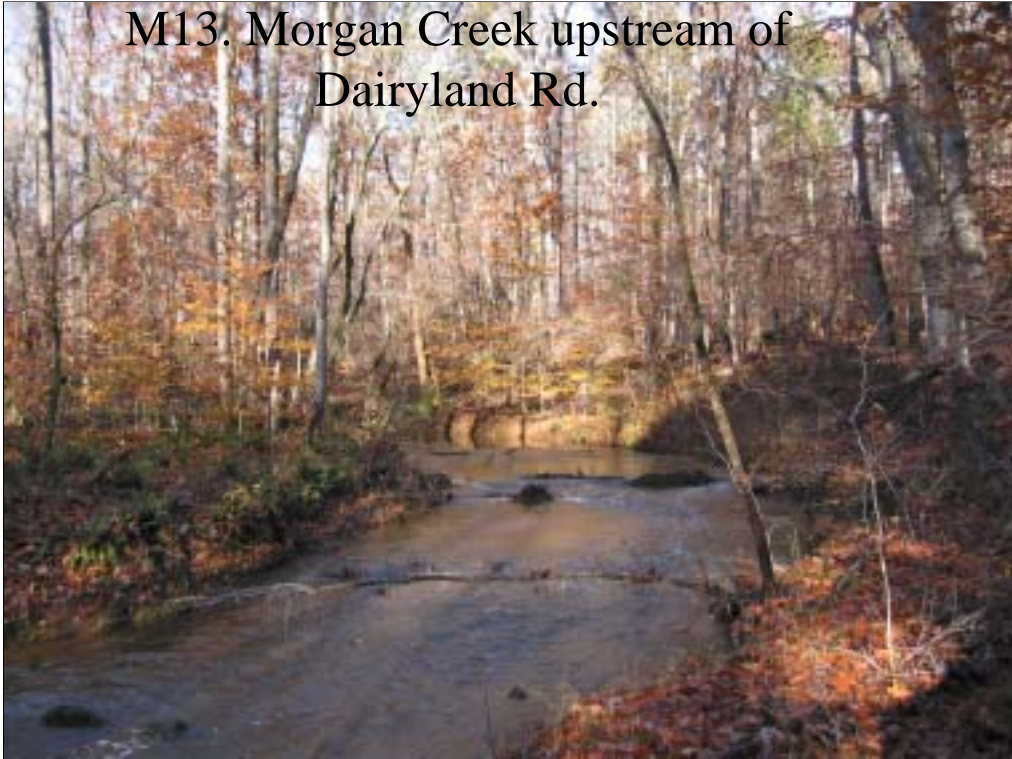
Prices Creek at Damascus Church Rd. – upstream of University Lake

Broad and easily accessible flood plain

Mid-age cypress grove – unique ecological community and habitat

*It was noted in the meeting that this is technically an invasion of a non-native species.

M13. Morgan Creek upstream of Dairyland Rd.



UPPER MORGAN CREEK GROUP

The Good

Morgan Creek upstream of Dairyland Rd.

Floodplain appears accessible – stream only slightly incised, if at all

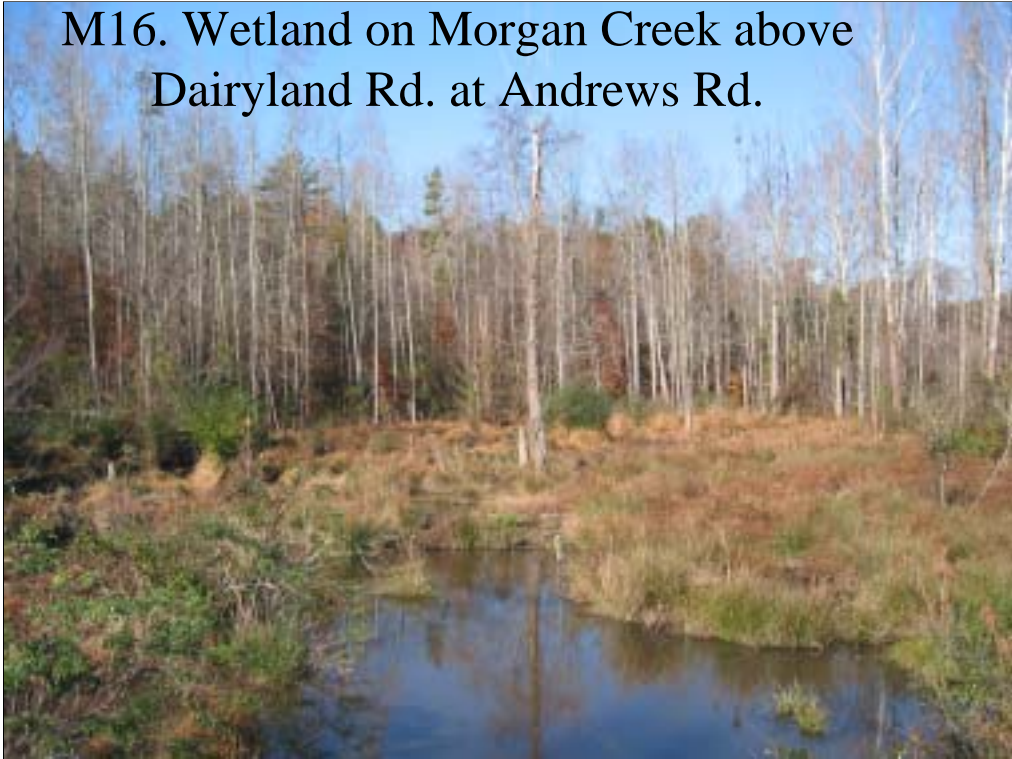
Rocky substrate helps maintain stream grade

Meander bend in photo indicative of good stream pattern in this area

Riparian buffer intact and extensive

Extensive portions of alluvial valley covered with mature hardwood forest in this area

M16. Wetland on Morgan Creek above Dairyland Rd. at Andrews Rd.



UPPER MORGAN CREEK GROUP

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Wetland on Morgan Creek at Andrews Rd.

Extensive riparian wetland formed by beaver impoundment

Good for flood control and pollutant removal

Prime habitat



UPPER MORGAN CREEK GROUP

The Bad

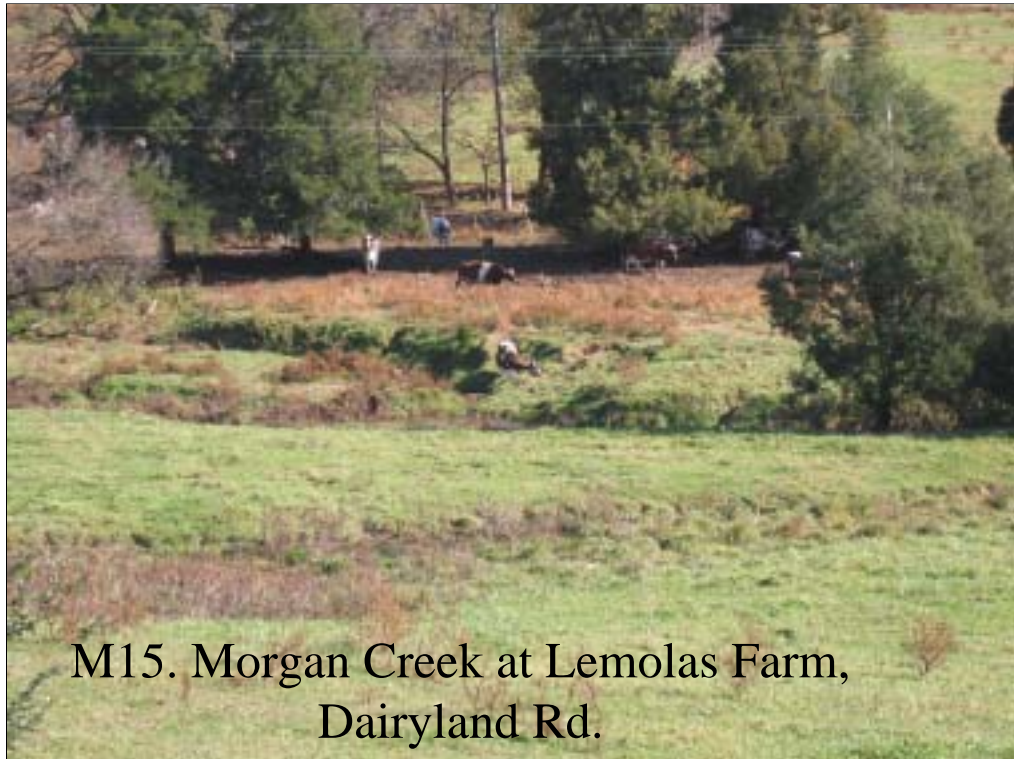
Unnamed tributary to Morgan Creek below Dairyland Rd.

Banks high and near vertical, with obvious areas of ongoing erosion

Stream significantly incised – floodplain not accessible

Trees falling into stream indicate erosion is ongoing

Undisturbed forest cover in floodplain indicates that source of hydromodification may be coming from upstream areas (possibly Lemola Dairy)



M15. Morgan Creek at Lemolas Farm,
Dairyland Rd.

UPPER MORGAN CREEK GROUP

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Morgan Creek along Dairyland Rd.

Riparian vegetation removed and disturbance ongoing

Cattle allowed in stream exacerbating active bank erosion

Stream likely to be incised throughout this section



Office Parking Adjacent to Creek

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Bolin Creek along Estes Dr./University Mall (not actually in Upper Morgan Creek watershed)

Stream likely to have been channelized in the past

Stream incised throughout this section – floodplain inaccessible

Riparian buffer removed with extensive impervious surfaces immediately adjacent to stream