Aquatic Restoration Watershed

Upper Shades Creek

HUC# 031502020301 **09/27/13**

Upper Shades Creek Watershed Facts:

- Flows to the Cahaba River
- Drains approximately 26,372 acres in Jefferson County
- Drains portions of the cities of Irondale, Mountain Brook, Homewood, Vestavia Hills, and Hoover, Alabama
- Considered *Strategic Habitat* by the US Fish & Wildlife Service due to the occurrence of threatened or endangered species
- Listed as an *Impaired Stream* by the Alabama Department of Environmental Management; Approved Total Maximum Daily Load

Water Quality Issues as noted on ADEM 303(d) list:

- Pathogens
- Siltation
- Excessive stormwater runoff
- Habitat alteration – channelization

Stakeholder Concerns:

- Litter

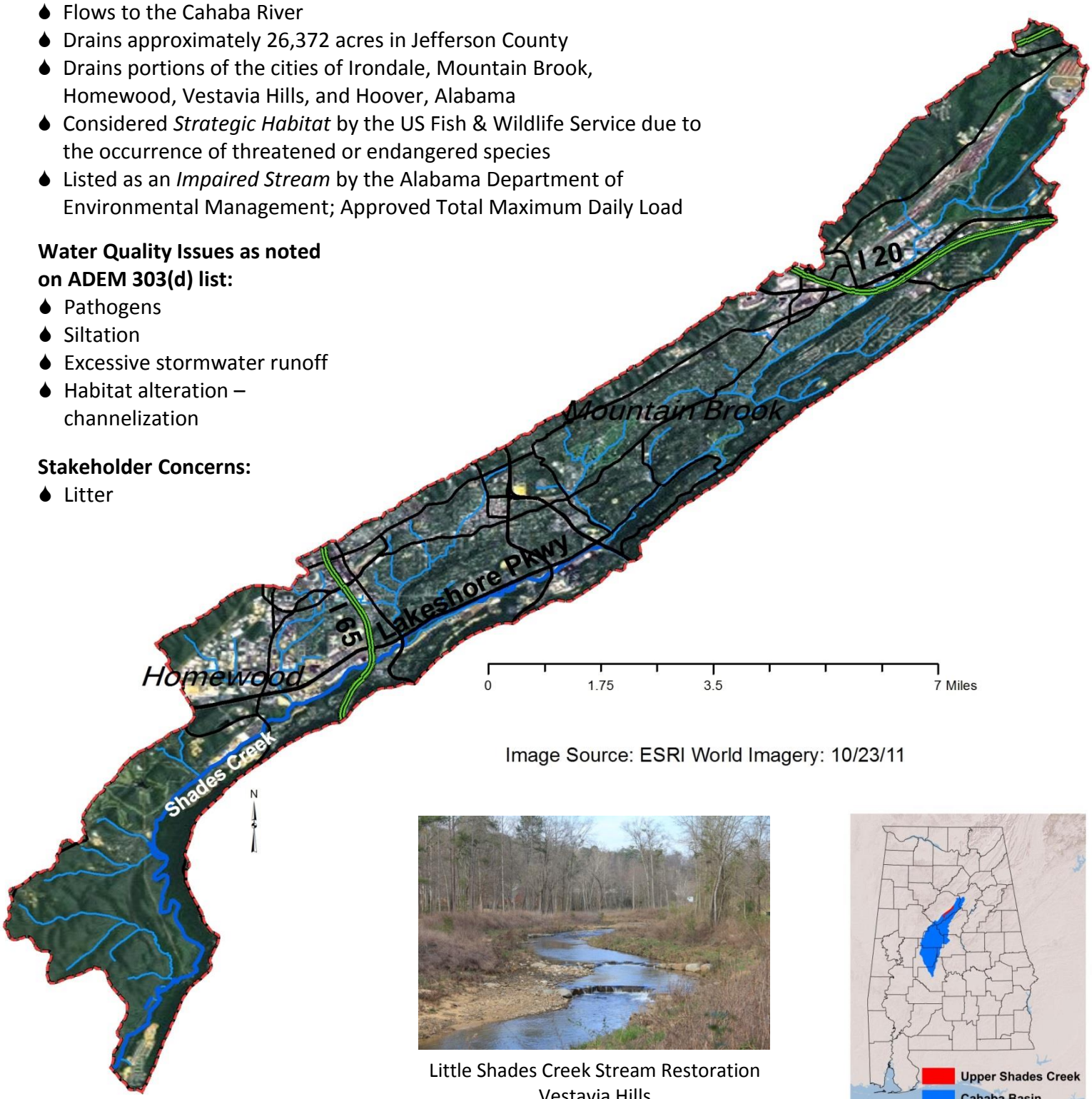

Image Source: ESRI World Imagery: 10/23/11

Little Shades Creek Stream Restoration
Vestavia Hills
Photo credit: Glenn Littleton

Specific Actions for Water Quality Improvement

Urban Land Practices:

- Best Management Practices for Construction and Road Building
  - Retain sediment on site
  - Stormwater management
- Low Impact Development Practices
  - Onsite stormwater retention
  - Porous pavement and paver products
  - Rainwater harvesting
  - Rain Gardens
  - Green roofs
  - Street planters
  - Infiltration basins
- Stream bank stabilization and restoration
- Citizen education
- Litter Clean-up events

Forestry Best Management Practices

Species of Concern as noted by the US Fish & Wildlife Service and Alabama Department of Environmental Management:

Federally listed Species:

Mussels: southern combshell, finelined pocketbook, orangenacre mucket, Alabama mocassinshell, triangular kidneyshell

Snails: round rocksnail, flat pebblesnail, cylindrical lioplax

Fishes: Cahaba shiner, goldline darter

Species of Concern:

Mussels: Alabama spike, delicate spike, Etowah heelsplitter, southern purple lilliput

Snails: Cahaba pebblesnail, ample elimia, princess elimia, cockle elimia, puzzle elimia, squat elimia, watercress snail, Cahaba pyrg, Cahaba ancylid

Fishes: coal darter

Cahaba shiner
Photo copyright: Fishes of Alabama and the Mobile Basin

Known Stakeholder Efforts

Alabama Clean Water Partnership provides stakeholder coordination and education.

Alabama Cooperative Extension System assists with producer meetings and technical assistance promoting precision agriculture.

Alabama Department of Conservation and Natural Resources provides technical resources for habitat recovery and monitoring.

Alabama Department of Environmental Management collects and analyzes water quality data used to determine stream impacts which assists NRCS in monitoring results of applied conservation practices. ADEM has a large data set (1991 – 2012) for the Upper Cahaba Watershed.

Alabama Department of Transportation - Using low impact development and best management practices in construction of Northern Beltline**;** Has provided materials including boulders and logs for stream restoration projects.

Alabama Forestry Commission provides outreach and technical recommendations to producers.

Cahaba River Society provides outreach, advocacy and public support to basin stakeholders.

Cawaco RC&D Council offers public education/outreach and project funding support.

City of Birmingham provides general support.

Friends of Shades Creek provides education and awareness to the public and citizen water quality monitoring.

Geological Survey of Alabama provides technical assistance, monitoring, and has fish, habitat, and mussel/snail data.

Jefferson County Commission provides general support.

Jefferson County Soil and Water Conservation District provides technical assistance and outreach to producers.

St. Clair County Soil and Water Conservation District provides technical assistance and outreach to producers.

USDA-Agricultural Research Service, Alabama assists with producer meetings and economic evaluation.

U.S. Environmental Protection Agency provides technical assistance and general support.

U.S. Fish and Wildlife Service helps restore habitat for listed mussels and improved fish passage and has threatened and endangered species and habitat data.

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

CWP Alabama
Clean Water Partnership

ADEM
Alabama Department of Environmental Management