

APPENDIX Q

BBA 18 Mitigation Study Area Justification

Pursuant to WRDA 1986, Section 906, as amended, CEMVN selects and designs mitigation projects using a watershed approach. Because the BBA 18 Construction Projects occur within the Lake Pontchartrain Basin (or watershed) and the Mississippi River Basin (or watershed), mitigation sites located within those basins are preferred. However, due to the large number of impacted acres, the lack of readily available or publicly-owned potential mitigation sites within the Lake Pontchartrain Basin (LPB) and the Mississippi River Basin (MSRB) and the aggressive time frame for completion of the BBA 18 projects (including mitigation features), the Project Delivery Team also identified potential mitigation sites using an expanded watershed approach. This expanded watershed would be used in the event the mitigation opportunities in the impacted basins, LPB and MSRB, are not sufficient to meet the BBA 18 mitigation requirements. The LPB and MSRB mitigation opportunities (both credit purchases and Corps-constructed mitigation projects) would be implemented to the extent practicable prior to use of mitigation sites or credit purchases outside those basins.

A watershed is an area of land that drains all the streams and rainfall to a common outlet. Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. One component used when determining ecoregions is hydrology, as well as other parameters such as vegetation and soils. Therefore, an ecoregion could be considered a type of watershed. The PDT determined that, when necessary to mitigate outside the LPB and the MSRB, the appropriate expanded watershed to utilize for the BBA 18 mitigation planning was the Mississippi Alluvial Plain, ecoregion 73, within south Louisiana.

The ecoregion map (Figure 1) depicts the Louisiana ecoregion boundaries that were established as part of a collaborative project primarily between U.S. Environmental Protection Agency–National Health and Environmental Effects Research Laboratory (Corvallis, Oregon), U.S. Geological Survey (USGS), U.S. Department of Agriculture–Natural Resources Conservation Service (NRCS), Louisiana Natural Heritage Program (LNHP) within the Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana Geological Survey (LGS), and Louisiana Department of Environmental Quality (LDEQ). Collaboration and consultation also occurred with the Louisiana Department of Agriculture and Forestry (LDAF), Louisiana Department of Natural Resources, U.S. Department of Agriculture–Forest Service (USFS), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and USGS–Center for Earth Resources Observation and Science to develop a common framework of ecological regions.

Nearly all of the impacts from the BBA 18 Construction projects fall within the LPB; impacts for the Comite project occur in both the LPB and the MSRB. Both the LPB and the MSRB include parts of the Mississippi Valley Loess Plains ecoregion (ecoregion 74) and the Mississippi Alluvial Plain ecoregion (ecoregion 73). When considering where the impacts of the BBA 18 Construction projects occur, one of the BBA 18 Construction projects (WSLP) falls within ecoregion 73, one of the projects falls in both ecoregion 73 and 74 (EBR), and one of the projects

falls mostly within ecoregion 74 (Comite) with some impacts in ecoregion 73. The EBR and Comite projects will cause impacts to BLH habitat and together will impact approximately twice as many AAHUs of BLH as will WSLP. Ecoregion 73 and ecoregion 74 both contain BLH habitat with the majority of the BLH in ecoregion 74 occurring in the southwest corner of the ecoregion (along its border with ecoregion 73). As shown in Figure 2, ecoregion 74 quickly transitions into evergreen forest (piney woods) when moving north and east in the ecoregion. Since the majority of ecoregion 74 is evergreen forest, and therefore offers little to no opportunity for BLH restoration or enhancement, and because both ecoregions contain BLH habitat, the PDT determined that mitigating BLH impacts in the Mississippi Alluvial Plain would offer the best opportunity to replace the lost functions and values of impacted BLH forest if those forests could not be mitigated in the LPB or MSRB.

All swamp impacts (due to WSLP) will occur within the Mississippi Alluvial Plain ecoregion 73. Mitigating those swamp impacts within the same ecoregion offers the best opportunity to compensate fully for the lost functions and values within an area sharing similar ecological attributes when mitigating outside the watershed of impacts.

Figure 1: Level III Ecoregions

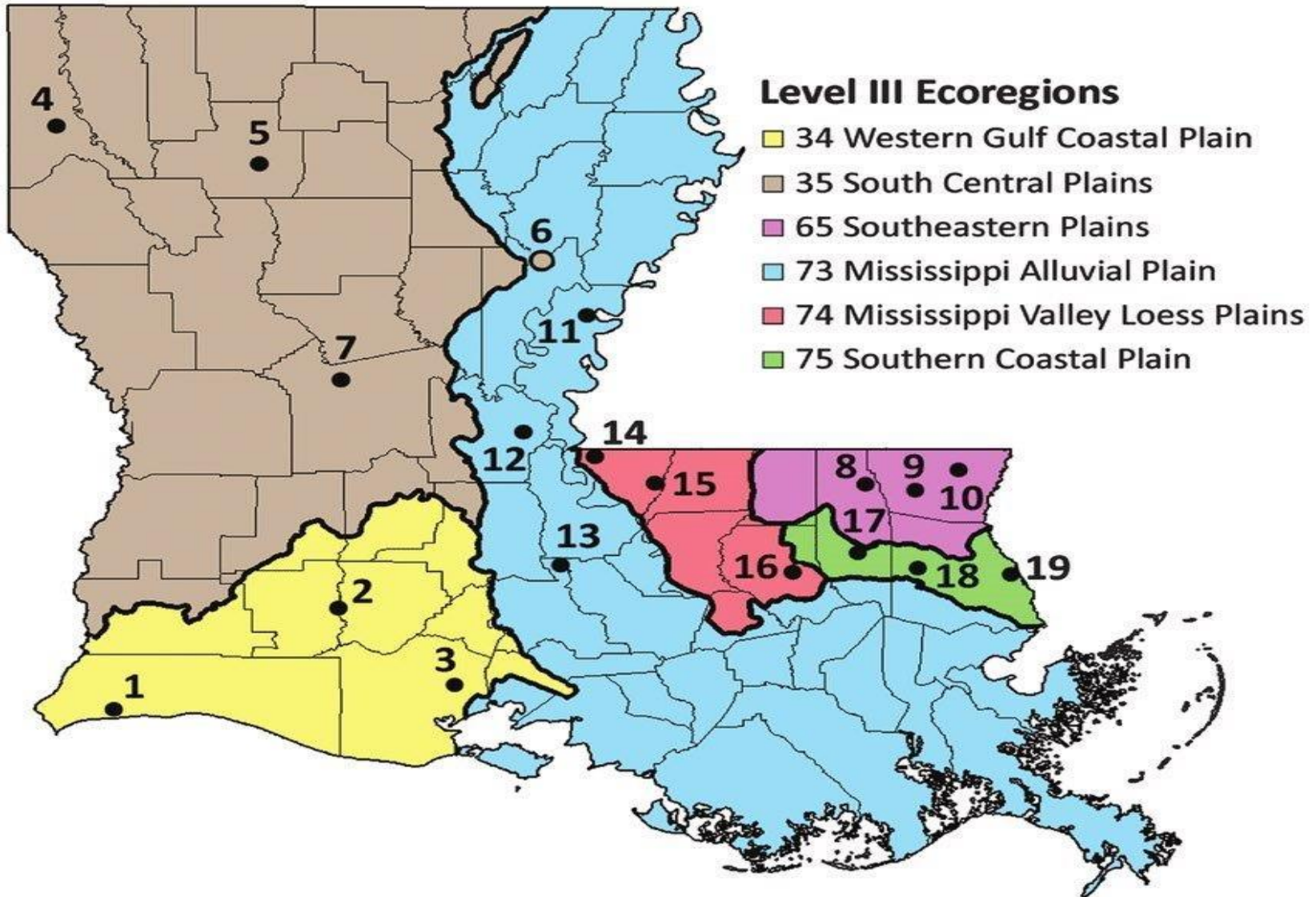
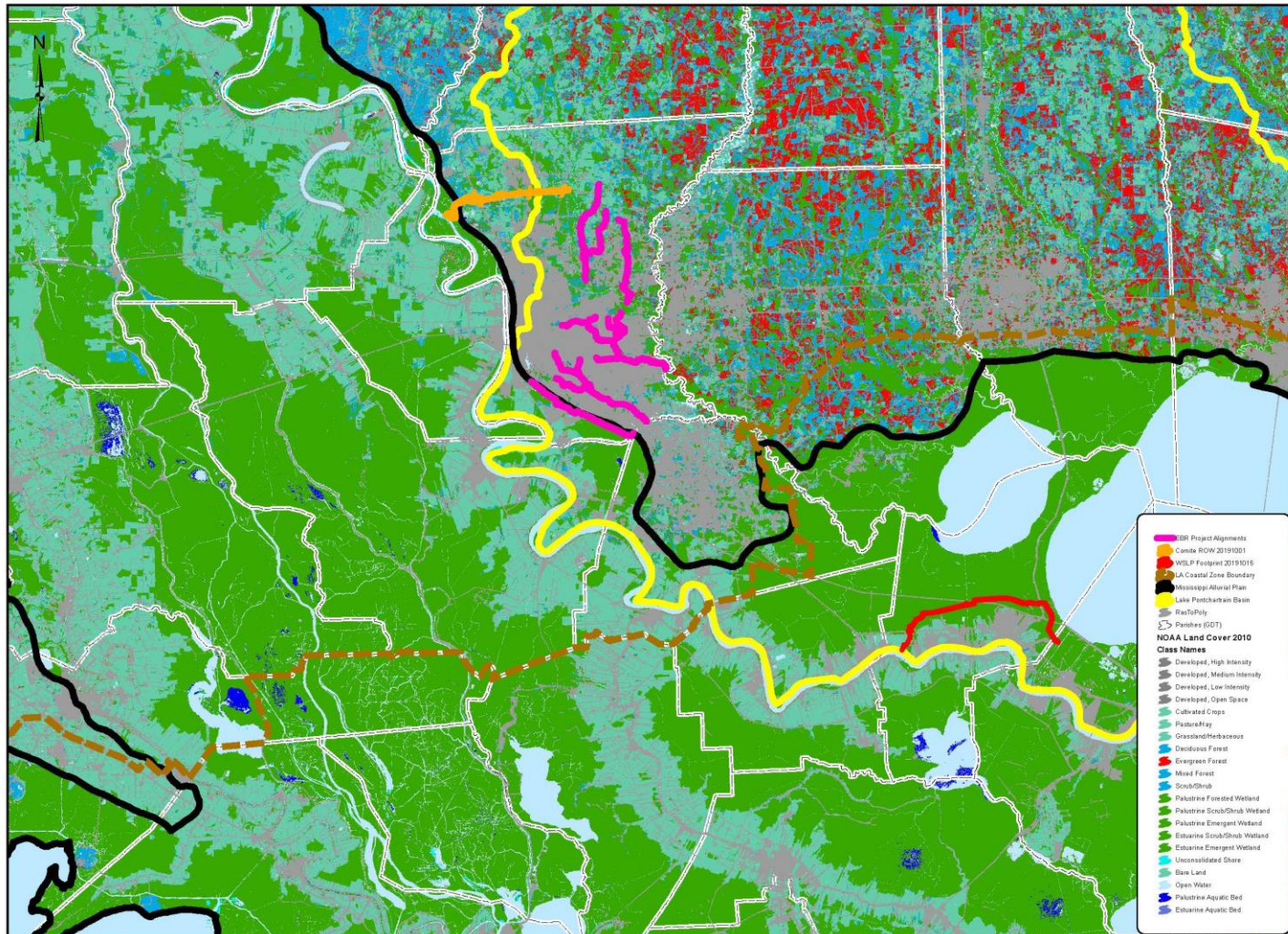


Figure 2:

Area Landcover for BBA Mitigation Projects with Project Footprints



Map Created: 22 Jan 2020

0 12.5 25 50 Miles