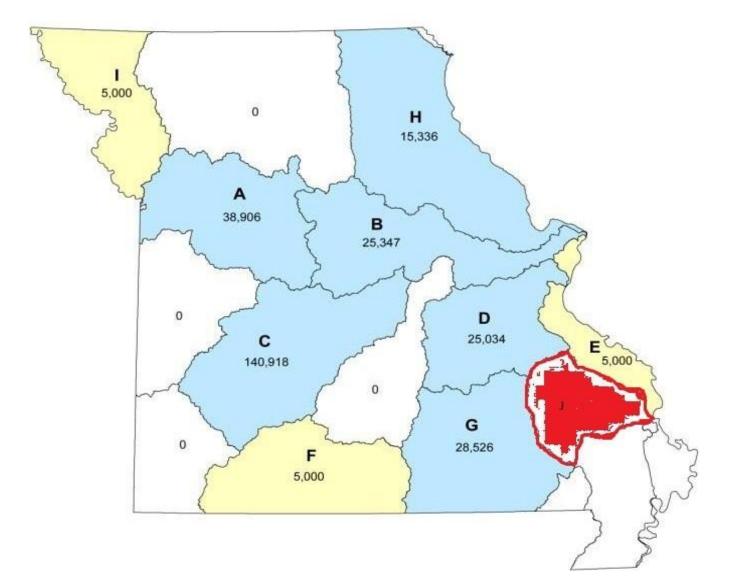
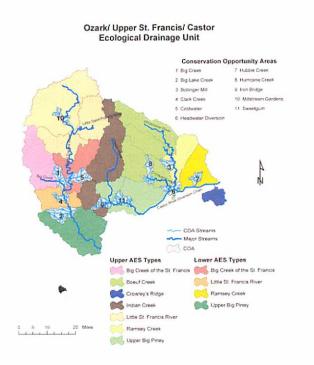
Stream Stewardship Trust Fund Approved and Proposed Service Areas



Approved Service Area with advanced SSTF Credits		
Approved Service Area with released SSTF Credits		
Proposed Service Area with Advanced SSTF Credits		
Service Area Not Proposed by Sponsor at this Time		

Label	EDU	Released Credits	Advanced Credits
Α	Central Plains/Blackwater/Lamine	38,906	
В	Ozark/Moreau/Loutre	25,347	
С	Ozark/Osage	140,918	
D	Ozark/Meramec	25,034	
E	Ozark/Apple/Joachim		5,000
F	Ozark/White		5,000
G	Ozark/Black/Current	28,526	
Н	Central Plains/Cuivre/Salt	15,336	
Ι	Central Plains/Nishnabotna/Platte		5,000
J	Ozark/Upper St. Francis/Castor		10,000



Upper St. Francis/Castor Rivers Geographic Service Area

Ecological Drainage Unit name: Upper St. Francis/Castor Rivers (HUCs: 07140107, 08020202)

Support Data: The information in this section of the Compensation Planning Framework is a summary of a much more complete treatment of the problems and opportunities for managing the flowing water resources in the Upper St. Francis/Castor Rivers EDU. The St. Francis and Headwater Diversion Watershed Inventory and Assessment (WIA) documents were written as part of a broader watershed planning and management effort by the Missouri Department of Conservation. These documents are an integral part of the Compensation Planning Framework and must be considered incorporated by reference. For more detail, including tabular and graphic supportive data, the reader is directed to the following WIAs:

St. Francis River: http://mdc.mo.gov/landwater-care/stream-and-watershed-management/missouri-watersheds/st-francis-river

Headwater Diversion: http://mdc.mo.gov/landwater-care/stream-and-watershed-management/missouri-watersheds/headwater-diversion

Geographic service area: The Upper St. Francis/Castor EDU lies in southeastern Missouri. It covers those portions of the St. Francis, Castor, and Whitewater River watersheds and the Headwater Diversion Channel that fall within the Ozark Highlands. About half of the EDU falls within the St. Francois Knobs and Basins ecological subsection, while the other half, to the south and east, straddles three other subsections; the Black River Ozark Border, Inner Ozark Border, and Outer Ozark Border. The Upper St. Francis/Castor Rivers basin is located in Cape Girardeau, Bollinger, Iron, Madison, Perry, Scott, St. Francois, Ste. Genevieve, and Wayne counties. Included are Bear Creek, Big Creek, Byrd Creek, Castor River, Castor River Diversion Channel, Crooked Creek, Hubble Creek, Little Saint Francis River, Little Whitewater Creek, Ramsey Creek, Saint Francis River, Whitewater River, and Wolf Creek. Historically,

the Castor and Whitewater Rivers were tributaries to the St. Francis River and continued their southward course into the Mississippi Alluvial Basin. However, in order to reduce the amount of runoff into the poorly drained lowlands the Headwater Diversion Channel was constructed in the early 1900's and now these two rivers drain into the Mississippi River via the diversion channel. Overall there are 3,995 miles of primary stream channel within this EDU, of which 1,423 miles are classified as perennial. Because of their basic physical, chemical and biological similarity, the similarity of the watershed land use and topography in each basin; including all of these streams in one EDU for mitigation planning will allow similar approaches to watershed, riparian, and stream channel problems and opportunities.

Threats to the aquatic resources in the Upper St. Francis/Castor Rivers EDU: Overall, the quality of aquatic resources in the Upper St. Francis/Castor Rivers EDU is quite good; however, while mostly dispersed throughout the basin, there are a number of problems facing streams in the EDU:

Aquatic Resource Problems

- Livestock overgrazing and unregulated access to streams causing stream bank erosion and sedimentation
- Destruction and removal of riparian corridors and vegetation from construction and livestock use
- Instream gravel operations (permitted and unpermitted) are cause an increase in stream bank erosion and sedimentation, increased turbidity, increases in local stream gradient, increased water temperature, and a decline in habitat quality for aquatic life
- Watershed urbanization in many of the communities are adversely impacting riparian corridors, increasing stormwater runoff, increasing impervious surfaces, increasing stream nutrients, and degradation to aquatic species diversity, especially when tied to channel alterations
- Historic lead, iron, and zinc mining in the areas of St. Francois, Ste., Genevieve, and Iron counties continues to impact streams
- Sedimentation from disturbed watershed areas related to row crop agriculture.
- Numerous unpermitted small-scale gravel mining operations
- Intensive recreational use

Water quality problems

- Nonpoint pollution problems related to the discharge of untreated sewage, fertilizer, power plant coal pile runoff, and animal manure off of agricultural, residential and commercially-developed lands (including land-applied sewage) causing high levels of nitrates, nitrites, phosphates, and fecal bacteria and fecal viruses, especially during high flow events, can cause both water quality and human health issues.
- In the St. Francis River Basin, historic lead, iron, and zinc mining areas have impacted streams with mine discharges and erosion of tailings
- Intensive livestock operations increase sediment and organic discharges to the stream
- Contamination of aquatic organisms, primarily with chlordane; heavy metals from mining, industrial and municipal effluents; and mercury, continue to plague the EDU
- Small scale limestone mining causing localized problems in streams, primarily due to sedimentation. Inactive open pit iron and lead mining areas also dot the watershed that can provide problems in kart areas with the potential for introducing pollutants directly into groundwater.
- Statewide levels of mercury contamination in aquatic organisms are present at various locations in the basin, but there are no health advisories specific to the St. Francis/Castor Rivers EDU.
- Continued growth of the municipalities within this EDU results in increased urban and commercial development that has increased sewage discharges from improperly functioning

septic tanks, runoff, and wastewater discharge, resulting in low dissolved oxygen, excess algal and bacterial growth from nutrients discharged into water bodies.

- Groundwater contamination by improper sewage treatment, leaking storage tanks and agricultural runoff or wastewater discharges.
- Contamination of streams from poorly managed confined livestock and poultry feeding operations that discharge harmful amounts of animal waste into spring branches and streams thereby increasing nitrate levels, fecal coliform levels, turbidity, other bacterial loading, and degrading the water quality of those water bodies
- Buried pipelines transporting crude oil, diesel fuel, and fertilizer cross portions of the basin and pose a threat to groundwater as well as streams in the watershed.

Historic aquatic resource loss in the Upper St. Francis/Castor Rivers EDU: The land use of the St. Francis and Castor River basins has undergone the same type of land disturbances that are typical of the Ozark Plateau. Suppression of wildfire was followed by mining, highly selective upland logging, annual burning to support open range for grazing, transient attempts at upland row cropping, a second intensive timber cutting concentrated on the slopes, and most recently, increased grazing intensity.

Prior to the 1800s, the sub basin was in the historic pine range -- a wildfire-maintained upland savannah dominated by shortleaf pine with a prairie grass understory. The steep valley walls grew lush forests of oak, hickory, and pine, while the valley bottoms produced dense stands of bottomland hardwoods. The upland savannah remained relatively unsettled by white immigrants. The more fertile soils and lower topographic relief on the east side of the basin (Whitewater River and Hubble Creek) appealed to German immigrant farmers attracted to the area by Mississippi River commerce.

Early prospectors mined mineral deposits (lead, zinc, silver, iron) on the slopes of the St. Francois Mountains. During the early settlement period (1800-1880) settlers raised crops in the valleys and grazed livestock on the forested hillsides and the natural grass of the uplands. Small logging operations selectively cut old growth timber in the uplands and a network of roads was developed. Land disturbances caused by early settlement had minimal effect on runoff and erosion.

During the timber boom (1880-1920), large-scale timber operations began. Many settlers moved to the region for jobs. Log drives down streams could be large and logs were not tied into rafts. In 1909, Missouri began regulating log drives because they were dangerous and damaged stream banks. By 1920, most of the marketable shortleaf pine and hardwoods had been cut and the larger mills ceased operation. Then harvest of the virgin forests, however, was only a prelude to the more serious watershed devastation that occurred for the next 40 years.

Many of the unemployed loggers and lumber mill workers settled on the cut-over and tax delinquent lands vacated by the departing timber companies. The new tenants were poor land stewards. Indiscriminate logging took more of the remaining trees, the remnant forest was burned each year to increase grass production, livestock over-grazed the newly converted range land and subsistence hill farms lost soil at a rate exceeding 200 tons per acre each year, and bottomland agriculture (row crops and livestock) expanded. One consequence of this poor stewardship was the accumulation and shifting of large gravel deposits that still clog and alter some stream channels today.

Agriculture peaked from 1940 to 1950, and then decreased. It took until the 1950's before erosive conditions in the forest watersheds began to significantly improve. Passage of an Open Range Law (required livestock fencing), changes in landowner attitudes concerning deliberate burning (fewer fires) and the acceptance of sensible soil conservation practices (reforestation of marginal

pasture and row crop acreage) accelerated the recovery. Forest canopies closed, leaf litter accumulated and an understory developed, which contributed to improved watersheds.

Current aquatic resource conditions in the Upper St. Francis/Castor Rivers EDU: The Upper St. Francis River sub basin is 77 percent woodland, 10 percent grassland, 7 percent cropland, and 6 percent other land uses, which include industrial, urban, and water developments. Small cropland tracts are most often restricted to the wider mainstem floodplains in St. Francois County, while grasslands (hay fields and pasture) tend to be associated with bottoms and cleared ridge-tops in Iron, Madison, and Wayne counties. Land use patterns have apparently stabilized.

The woodlands are usually large upland tracts of oak-hickory forest dominated by a black-scarlet oak association (45%) and a secondary white oak association (31%). Succession is toward conversion to a more desirable white oak forest type. The tracts are considered moderately (56%) to poorly (26%) stocked with proportional stand size-classes of 49 percent sawtimber, 33 percent poletimber and 18 percent seedlings and saplings. Most of the woodlands (71%) are privately owned; 19 percent are under state or federal stewardship. Livestock grazing in woodlands can present some ecological and hydrologic concerns relating to canopy closure, understory development, leaf litter accumulation, and soil compaction.

A local mining industry (iron, lead, zinc, quarried red granite) and various small urban centers provide important components of the basin's economy. Small farms are common throughout the basin, but most farm operators supplement their incomes with off-farm employment.

The sub basin is mostly rural and sparsely populated. The communities of Farmington, Fredericktown, and Ironton and the area surrounding Wappapello Lake are experiencing the greatest population growth. Uncontrolled sediment and stormwater runoff at construction sites can pose localized problems. There are no industrial developments, associated with the small urban centers, which pose serious threats to local streams.

Collectively, the watershed areas of the Castor River basin can be classified as 55 percent woodland, 22 percent grassland, and 19 percent cropland. However, a transition within the basin from 80 percent woodland on the west side to 75 percent agriculture on the east side provides a wide diversity of land use. Land use patterns have apparently stabilized. Woodland acreage has only expanded by 1 percent since 1972 and cropland rotation acreage 9row crop to pasture conversions) has remained near 38 percent for the past 10 years.

Most of the uplands are large contiguous tracts of oak-hickory forest dominated by a black-scarlet oak association (52%) and a secondary white oak association (24%). Succession is toward conversion to a white oak forest type. An odd feature of the basin is the occurrence of species such as yellow poplar, beech and sweetgum that are not usually found in the Ozark uplands. The tracts are considered moderately to fully stocked with proportional stand size-classes of 50 percent sawtimber, 25 percent poletimber and 25 percent seedlings and saplings. Livestock grazing in all basin woodlands still presents some ecological and hydrologic concerns relating to canopy closure, leaf litter accumulation and soil compaction. Only about 20 percent of the Castor River and Crooked Creek wooded uplands are grazed because of the low agricultural potential and the impracticality of fencing rugged terrain. By contrast, about 80 percent of the Whitewater River, Hubble Creek , and Castor River Diversion Channel wooded uplands are grazed because of smaller tract size, gentler terrain, richer soil and a higher landowner reliance on agricultural production.

Agriculture dominates the floodplains of all major tributaries wherever topography and drainage will allow the use of farm machinery or fences. Floodplain widths, field sizes, soil types and soil fertilities generally dictate specific land use. Agriculture in the floodplains varies from small, unimproved pastures in the extreme upper watersheds to intensive row crop production in the lower subbasins. Nearly equal emphasis on improved pasture, row crops and hay fields can be expected at some point along the downstream (linear) transition of land use. Lateral land use transitions (perpendicular to stream channels) from row crop and hay fields to pasture and woodlands also occur. Most of the remnant woodlands in the larger floodplains are restricted to high relief topography or low lying wet areas.

The bottomland immediately adjacent to the Diversion Channel (from the community of Whitewater to the Mississippi River) functions as a floodway and also contains 23,000 acres of dry detention storage that protects the main Diversion Channel levee from high flood flows. Most drainage within the extensively rowcropped floodway/detention system is controlled with only a few miles of small, privately owned drainage ditches and levees. All remnant natural stream channels within the waterway including the lower reaches of Crooked Creek, Whitewater River, and Hubble Creek have been channelized to improve agricultural drainage.

A total of 130 fish, 45 mussels, and 14 crayfish either inhabit or at one time inhabited the Upper St. Francis/Castor EDU. According to the Missouri Natural Heritage Program there are 17 globally listed (rare, threatened, or endangered) species and 37 state listed species. The fish assemblage has no species that are unique to it. It is characterized by a distinctive combination of species found in adjacent EDUs and Aquatic Subregions. Distinctive/characteristic fish species include the shadow and spotted bass, longear sunfish, largescale stoneroller, striped shiner, steelcolor shiner, Ozark shiner, blackspotted topminnow, brindled madtom, rainbow darter, speckled darter, scaly sand darter, longnose darter, and dusky darter. Historically, one of the most distinctive features of this EDU was the prevalence of lowland species in the lower sections of the St. Francis River, however, the construction of Lake Wappapello inundated this transition zone and most of these lowland species no longer persist above the lake. The spothanded, devil, St. Francis River, virile, and golden crayfish are the most widespread crayfish species. The Big Creek and St. Francis River crayfish are endemic to this EDU. The Hubbs crayfish is also a distinctive species due to its occurrence only in south-flowing drainages of the Ozarks. Common mussels include the fatmucket, pondmussel, giant floater, little spectaclecase, and Ouachita kidneyshell. For conservation assessment purposes 104 of the 189 species were identified as target species.

A large number of unique natural communities are present in the White River basin: Deep Muck Fen, Dolomite Glade, Dry-Mesic Chert Forest, Dry-Mesic Forest, Dry-Mesic Igneous Forest, Dry-Mesic Limestone/Dolomite Forest, Dry-Mesic Sandstone Forest, Dry Cave, Dry Chert Forest, Dry Igneous Cliff, Dry Igneous Forest, Dry Limestone/Dolomite Cliff, Dry Sandstone Cliff, Fen, Flatwoods, Forested Acid Seep, Forested Fen Freshwater Marsh, Gravel Wash, Igneous Glade, Igneous Glade, Igneous Savanna, Igneous Talus, Mesic Forest, Mesic Igneous Forest, Moist Igneous Cliff, Moist Limestone/Dolomite Cliff, Moist Sandstone Cliff, Pond Marsh, Pond Shrub Swamp, Sandstone Glade, Wet-Mesic Bottomland Forest, Wet Bottomland Forest, Wet Pit Cave, Xeric Igneous Forest, and Xeric Sandstone Forest.

Much greater detail on current aquatic resource conditions in the St. Francis/Castor River EDU is available in the two WIA documents cited under the Support Data section above, and readers are encouraged to download and read them.

Aquatic resource goals for the Upper St. Francis/Castor Rivers EDU: Our major goals for the Upper St. Francis/Castor Rivers EDU are improved water quality, better riparian and aquatic habitat conditions, the maintenance of diverse and abundant populations of native aquatic organisms and sport fish, and increased public appreciation for the stream resources. Periodic aquatic invertebrate and fish samples will be collected and appropriate habitat surveys will be conducted in priority areas to determine and delineate

project sites. Onsite habitat improvement projects on federal, state, and local government lands and those of private landowners will focus on improving stream channel and riparian area stability in priority areas (see prioritization strategy below) in the EDU:

- Watershed uplands should have minimal sources of eroded soil and other non-point water quality problems; mitigation planning may identify significant sources of these pollutants and strive to restore and stabilize them, especially near confined animal feeding operations, land-applied sewage effluent areas, and nonpoint pollution sources.
- Well vegetated riparian areas will be restored, expanded and maintained using bottomland forest species (when adapted to the site, especially in areas with high diversity of aquatic life, presence of species of conservation concern, and areas managed for specific species or communities. Urbanizing areas and those with excessive livestock use will be targeted.
- Restore instream habitat (pools with woody debris, boulders and/or aquatic vegetation) in areas of management emphasis to benefit resident sport fish, native non game fishes (including, but not limited to, mountain madtom, Ozark shiner, longnose darter, scaly sand darter, harlequin darter, southern brook lamprey, American brook lamprey, Big Creek crayfish, St. Francis River crayfish, and purple lilliput) and unique or depressed aquatic invertebrate populations.
- In-channel hydraulics will be restored (e.g., by managing streambed degradation with riffle structures, installing biotechnical and other stream bank stabilization structures in areas of priority need, etc.) to balance the hydrological and in channel physical conditions of streams.
- Meet state standards for water quality.

Enforcement of existing water quality and other stream related regulations and necessary revisions and additions to these regulations will help reduce violations and lead to further water quality improvements. Working with related agencies to promote public awareness and incentive programs and cooperating with citizen groups and landowners will result in improved watershed conditions and better stream quality.

Prioritization strategy for selecting and implementing mitigation projects in the Upper St. Francis/Castor Rivers EDU: Mitigation projects in the Upper St. Francis/Castor Rivers EDU will be

Prancis/Castor Rivers EDU: Mitigation projects in the Opper St. Francis/Castor Rivers EDU will be located in areas that provide physical, chemical and/or biological improvements to stream ecological values of the basin, and are technically feasible and appropriate to install at the project site. Of highest priority are areas of biodiversity that have been deemed Conservation Opportunity Areas (COAs) using the assessment by the interagency Missouri Resource Assessment Partnership (MoRAP). COAs, when taken collectively, represent the priority areas required to maintain Missouri's current biodiversity levels. By using the MoRAP conservation assessment process, within the Upper St. Francis/Castor Rivers EDU, 10 COAs representing 104 target species were identified: Big Creek, Big Lake Creek, Bollinger Mill, Clark Creek, Coldwater, Hubble Creek, Hurricane Creek, Iron Bridge, Millstream Gardens, and Sweetgum. In total, these COAs constitute 373 miles of stream, representing 9.6% of the total stream miles within the Upper St. Francis/Castor Rivers EDU. Furthermore, the focus areas themselves represent an overall area of just 241 square miles, which is only 9.6% of the region. In addition to COAs, other priority sites will be identified when a mitigation project is not possible in one of the above COAs:

- Two miles upstream and downstream of all MDC, state park and other local, state or federallyowned public areas managed for natural resource or public recreation purposes.
- 303 (d) listed waters
- Stream reaches identified as State Outstanding Resource Waters by the Missouri Department of Natural Resources
- Stream reaches managed as special management areas by the Missouri Department of Conservation
- Stream reaches containing state or federal species of conservation concern

- Greenway corridors proposed or managed by federal, state, or local entities for public recreation or habitat improvement/protection purposes
- Areas of high aquatic mussel, invertebrate or fish community diversity, especially in urbanizing areas

Preservation objectives for the Upper St. Francis/Castor Rivers EDU: Preservation projects are an important part of watershed management, in that critical stream reaches, unique habitats, and protection of important water quality areas of the Upper St. Francis/Castor River EDU basin will contribute to sustaining ecological functioning over the long term. However, the priority of projects will continue to be on restoration and establishment; preservation will be used in the Upper St. Francis/Castor River EDU when:

- The resources to be preserved provide important physical, chemical and/or biological functions for the watershed;
- The resources contribute significantly to the ecological sustainability of the watershed;
- Preservation is appropriate, practicable, and has the support of the IRT and the Corps
- The aquatic resources in question are under threat of destruction or degradation; and/or
- The preserved site will be permanently protected through fee-title transfer to MDC or a permanent easement held by MDC or a valid not-for-profit natural resources land trust;

The credit value of preservation projects is less than that of restoration or establishment projects; however, the lower weighting of preservation projects is a feature of the Missouri Stream Mitigation Method of credit calculation and no additional "discounting" of preservation project credits will be undertaken. It is possible that some preservation projects will contain wetland values; however, the Stream Stewardship Trust Fund is a stream mitigation program and will not be involved in mitigating wetlands. Therefore, the presence of a high quality wetland in a riparian or floodplain area may factor into a decision on whether a particular preservation tract is acquired, but wetland values will be included along with other land uses and will not carry any additional weight when project credits are calculated.

Public and private stakeholder involvement in compensatory mitigation in the Upper St. Francis/Castor River EDU: As part of the siting of ILF project sites within the Upper St. Francis/Castor River EDU, MCHF will seek out local input from federal and state agencies, municipalities, landowners, natural resource management groups and advisory groups within the watershed as appropriate. The ILF program will work with any willing public agencies to prioritize watersheds for ILF projects. ILF project sites will not be placed on public lands.

Long term protection/management strategies for compensatory mitigation in the Upper St. Francis/Castor Rivers EDU: The Stream Stewardship Trust Fund has several legal mechanisms whereby its ILF Program compensatory mitigation projects would receive long-term protection and management:

- A project area is purchased from a willing seller and becomes a part of the land holdings of the Missouri Department of Conservation (MDC) with MDC being the deed owner. MDC agrees to manage the area consistent with best management practices for streams and streamside areas.
- A project with a landowner or other entity is protected by perpetual easement, where the landowner donates, sells or otherwise transfers an easement in perpetuity to the Missouri Department of Conservation, natural resource-oriented federal, state or local government agency, or a natural resource-oriented land trust like the Nature Conservancy, Ozark Regional Land Trust, Greenbelt Land Trust or similar not-for-profit entity.

In addition, in rare instances with COE approval and the consent of the IRT where a high priority project cannot be secured through fee title acquisition or a perpetual easement, the following mechanisms for long term protection and management may be considered:

- A project with a landowner who does not want to be involved in a perpetual easement can choose a long term(30-year) easement by donating, selling or otherwise transferring an easement for a 30 year period to the Missouri Department of Conservation, natural resource-oriented federal, state, or local government agency, or a natural resource-oriented land trust like the Nature Conservancy, Ozark Regional Land Trust, Greenbelt Land Trust or similar not-for-profit entity
- A project with a landowner or other entity that does not want to be involved with an easement can choose a special maintenance agreement, a formal contractual arrangement between the MCHF and a landowner or other entity where the landowner or other entity promises to meet specified maintenance conditions for a 30-year period. These projects are transferred to a new owner in the event of sale. If the landowner does not do so, or the new landowner refuses to sign a new agreement, the maintenance responsibilities (and the penalties for violating them) are retained by the original landowner.

Under the SSTF Program, the management agreement or terms of a conservation easement would describe the conservation values and permitted/prohibited uses for each property. On all properties, MDC would perform annual stewardship monitoring with onsite field observations, reporting, and enforcement actions, as appropriate.

Strategy for periodic evaluation and reporting in the Upper St. Francis/Castor Rivers EDU: Evaluation, monitoring, and reporting is required of all compensatory mitigation projects to determine if the project is meeting its performance standards and if additional measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives. Project specific mitigation plans (see Appendix C) will detail the parameters to be monitored, the length of the monitoring period, the dates that the reports must be submitted, the party responsible for conducting the monitoring, the frequency for submitting monitoring reports to the Corps, and the party responsible for submitting those monitoring reports to the Corps and the IRT. Unless otherwise specified in the approved project-specific mitigation plan, data collection for performance objectives will occur once during the year and will be reported in an annual report until a project has been shown to meet performance standards (no less than five years). The level of detail and substance of the reports will be commensurate with the scale and scope of the compensatory mitigation project. Compliance monitoring will also be conducted annually until performance standards are met and will be reported in the annual report. After a project has met performance standards, the frequency of all monitoring will decrease to a term not to be less than once every five years. Changes in reporting may be required by the Corps and the IRT as necessary to accommodate adaptive changes in the project, natural disasters, environmental changes, etc.

Evaluation and reporting will concentrate on those metrics involved in performance standards and will not include species or community biotic sampling until late in the project cycle, if at all. Temporal improvement of biota and their communities often lags restoration projects by years, and sometimes decades, and biological sampling often is inconclusive as to whether a project has improved biotic communities. At the conclusion of a project (defined as that point where the performance standards are met, and aquatic resources appear healthy and self-sustaining in a relatively mature condition), aquatic invertebrate and/or fish diversity indices may be calculated and compared to the before-project condition and to reference indices obtained from stable streams of similar type, order, and size elsewhere within the watershed, if the biologist in charge of the project determines it is necessary.

The Corps is required to provide monitoring reports to interested federal, tribal, state, and local resource agencies, and the public, upon request.