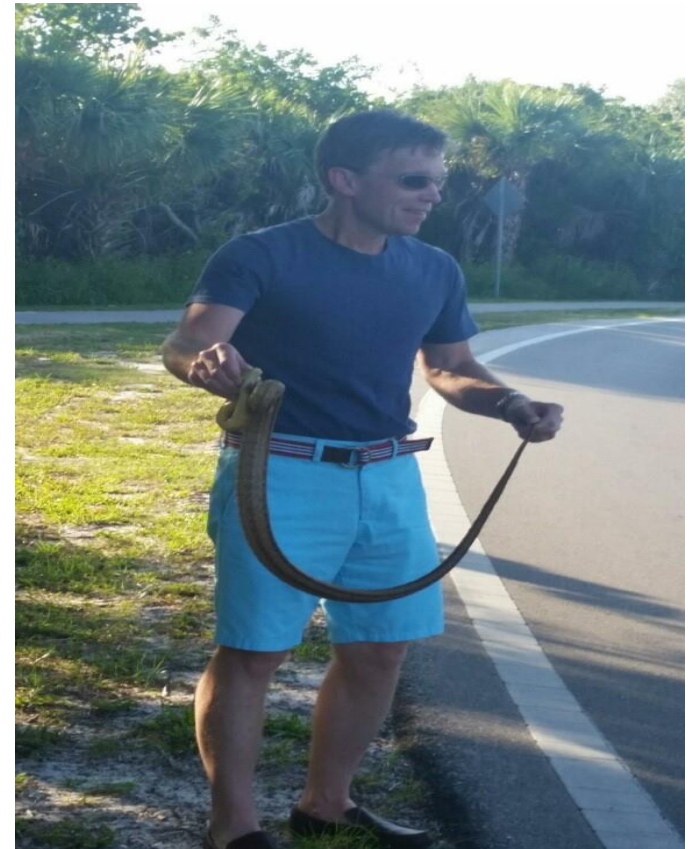


New Generation for PL566 - Missouri Projects

Presented by
Chris Hamilton
Natural Resources Conservation Service
Assistant State Conservationist –
Water Resources and Easements



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Watershed Programs

What's The Future?



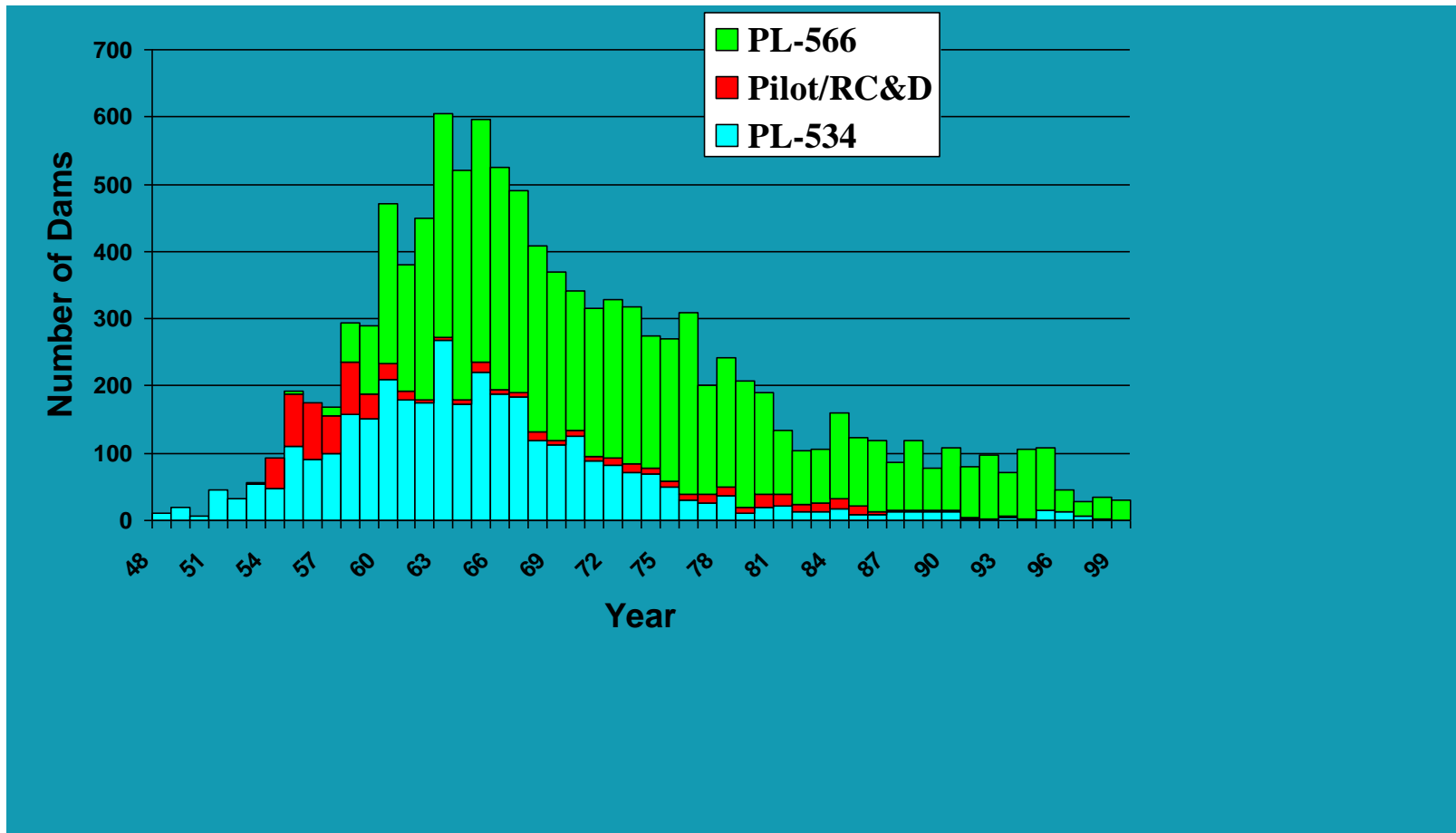
October 2019



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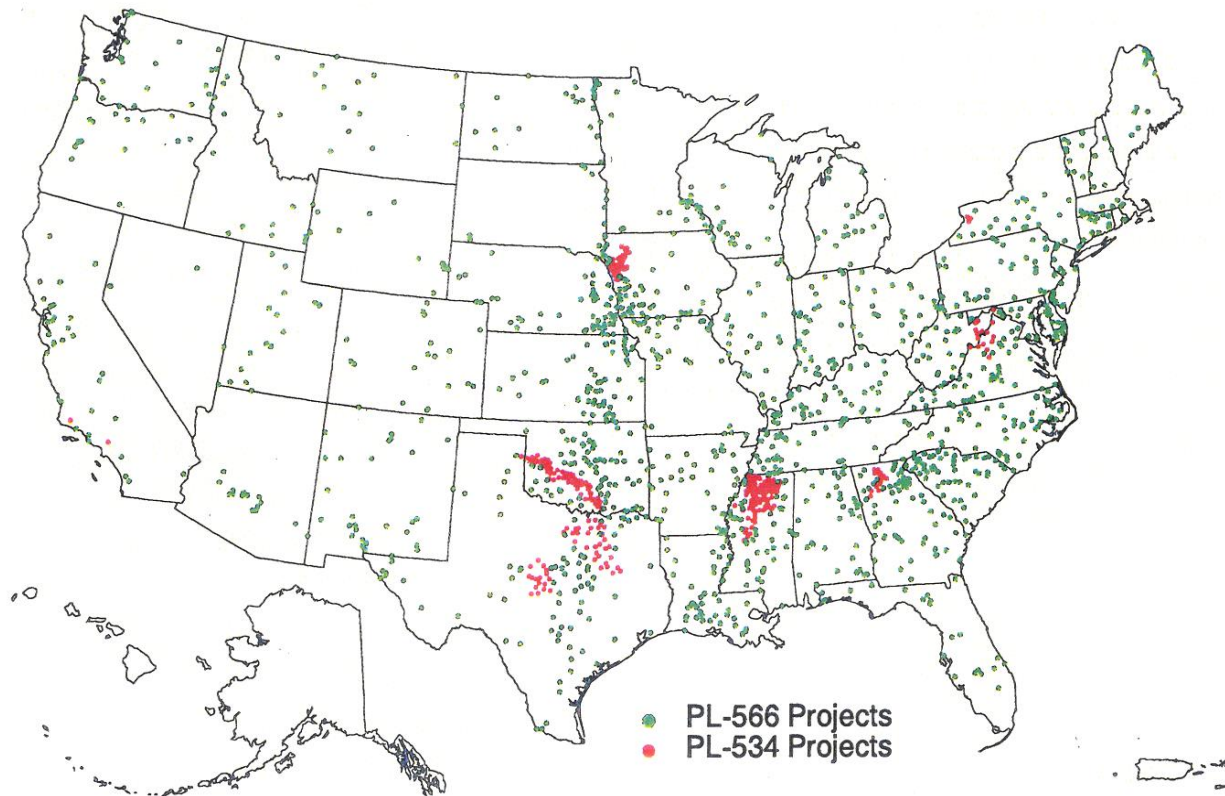
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Watershed Programs – History



Watershed Programs – History – PL-566

Watershed Project Locations



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Watershed and Flood Prevention Operations

Fiscal Year	Program Funding
2000	\$99 M
2001	\$99 M
2002	\$106 M
2003	\$109 M
2004	\$86 M
2005	\$74 M
2006	\$75 M
2007	\$0 M
2008	\$29 M
2009	\$24 M
(ARRA) 2009	\$145 M
2010	\$30 M
2017	\$150 M
2018	\$150M
2019	\$200 M*
Total	\$1,376 M

Includes \$50M of Mandatory funding in the Farmbill



Mission Support Services



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Watershed Programs – Future - Streamline

Watershed Streamlining Team



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Missouri PL-566 Watershed Program

Status of PL-566 Watershed Projects

Missouri

October 2018

- Active Approved Application
- Authorized for Planning
- Watershed Plan Approved for Construction
- Project Completed
- Project Terminated or not Active

- Water Bodies
- Rivers
- County Boundaries

40 0 40 80 Miles
50 0 50 100 Kilometers



PL566 Watersheds

Name	Acres
102 River Tributaries.....	19,301
Logan Creek.....	148,880
East Fork Big Creek.....	62,073
Panther Creek.....	22,035
Platte River Tributaries.....	12,800
Hoover-Frankum.....	18,307
Tabo Creek.....	84,895
South Fork Blackwater.....	65,179
Callahan Creek.....	22,170
Loutre Township.....	31,794
Bear Creek.....	3,195
Wellington-Napoleon.....	19,130
West Fork Big Creek.....	187,290
Grindstone-Lost-Muddy Creeks.....	209,100
West Fork of Grand River.....	183,370
Fourche Creek (Arkansas).....	64,480
Lost Creek.....	39,100
North Wyaconda River.....	52,185
Willow-Cravens Creek.....	28,102
Durgens Creek.....	26,160
Brownwood-Jenkins Basin.....	12,800
Buck-Doe Run Creeks.....	26,346
Clarence Cannon Memorial.....	29,184
Little Sni-A-Bar.....	24,896
Upper Middle Fabius (Amended).....	165,800
Lower Little Black River.....	124,390
Black Creek (Arkansas).....	4,720
Mississippi County Spillway Area.....	100,314
St. Johns Bayou Basin.....	249,447
Hickory Creek.....	34,627
Little Drywood Creek.....	112,570
Cane Creek.....	218,080
Williams Creek.....	15,200
Pike Creek.....	92,332
Indian Creek (Iowa).....	3,707
Little Wyaconda-Sugar Creek (Amended).....	98,958
Blackbird-Wildcat Creeks (Amended).....	101,200
Upper Locust (Amended).....	238,700
Reeds Springs.....	60,929
Portageville Bay.....	32,000
North Fork Honey Creek.....	41,600
Little Third Fork.....	41,600
Troublesome Creek.....	89,300
Honey-Sugar Creek.....	29,115
Lower Middle Fabius.....	103,749
MtI Creek (Iowa).....	25,500
Big Creek-Hurricane Creek (Amended).....	176,800
Mozingo Creek.....	111,180
Salt Creek-Garden of Eden.....	55,156
Upper Little Black River.....	124,749
Bee Branch.....	32,288
Peruque Creek.....	56,256
Medicine Creek.....	111,180
East yellow Creek.....	122,700
Pike-Spencer (Amended).....	239,746
North Inter River Watershed.....	101,900
Cache River Watershed.....	32,065
East Fork of Grand River.....	74,320
Clear, Cayhoga, Muddy.....	74,320
East 102 River.....	27,523
Lower 102 River.....	27,523
Middle Fork Chariton.....	242,500
North River.....	225,730
Middle Fork of Salt River.....	123,700
Crooked-Otter Creeks Watershed.....	78,700
East Locust Creek.....	78,700
Monteau Creek.....	214,790
Crooked Creek.....	21,000
Westons Bear Creek.....	35,600
Grassy Creek.....	6,745
Town Branch (Albany).....	4,410
Little Otter Creek.....	1,925
Town Branch (Marthasville).....	6,480
Kelly Creek.....	23,400
Lost Creek.....	10,304
A.....	
B East Branch of South Fork of Blackwater.....	12,613

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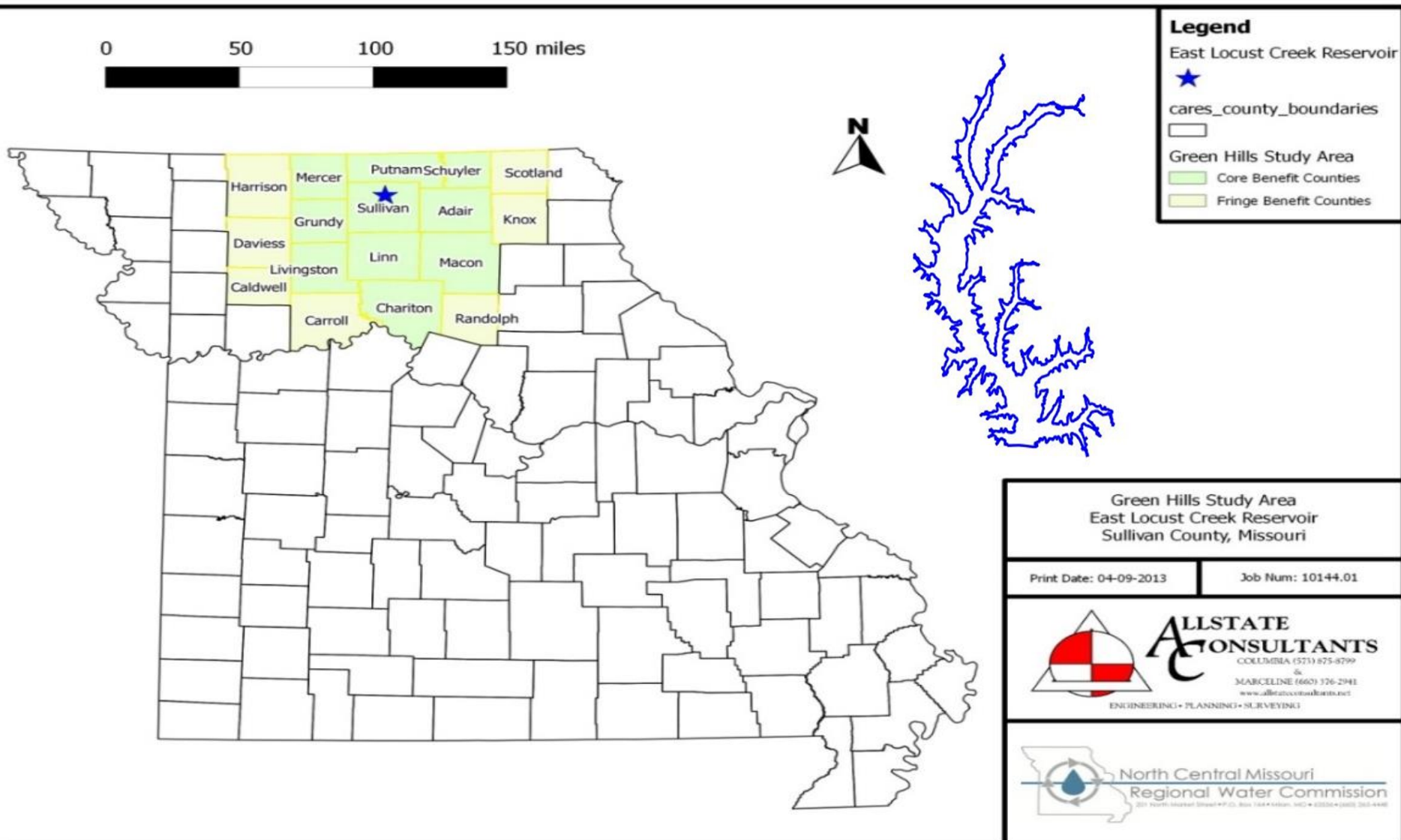
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United States Department of Agriculture

East Locust Creek Reservoir Project

Missouri



Project Description

► Purpose

- Water Supply (45,045 ac-ft) (90% of pool volume)
Seven million gallons of water per day
- Flood control (8,863 ac-ft above pool)
- Recreation (1,400 ac-ft) (3% of pool volume)
- Sediment (3,500 ac-ft) (7% of pool volume)

► Reservoir

- Size – 2,328 acres
- 82 Miles of Shoreline
- Max Pool Depth – 60'
- Dam Height – 79'



What's Unique About ELCR

- ▶ Overwhelming local support
- ▶ ½ Cent county wide sales tax (81.25% Favor)
- ▶ Strong support from the State of Missouri
- ▶ Special authorization & federal cost share
- ▶ Growth is limited by water
- ▶ Positive economic impact (\$14M annual)



Permitting Timeline



- ▶ Series of drought of 1970s and early 1980s – Lots of talk about the need for a reservoir
- ▶ Relatively wet years in the late 1980s–2000 – less talk about the need for a reservoir
- ▶ 1995 – Preliminary Engineering Report discussing reservoir options
- ▶ Drought of 2000–2001, North Central Missouri Regional Water Commission formed to encourage regionalization and build a lake.
- ▶ 2003 – Water system master plan and feasibility study
- ▶ 2005 – Congressional authorization to build ELCR
- ▶ 2007 – Environmental Impact Study (EIS) published and Record of Decision to proceed (7 MGD)
- ▶ 2009 – Land Acquisition Begins



Permitting Timeline Continued

- ▶ 2010–2012 – Corps of Engineers (COE) requires that a 404(b) alternatives analysis be done because the NEPA alternatives analysis is inadequate. A supplemental Environmental Impact Statement (SEIS) becomes necessary.
- ▶ 2014 – Funding available for permitting activity
- ▶ 2014–2015 Jurisdictional Determinations
- ▶ 2015 – First sections of SEIS submitted for COE
- ▶ 2016 – Endangered Species surveyed and Indiana and Northern Long Eared bats found in lake bed.
- ▶ 2017 – Land acquisition Complete
- ▶ 2017–2018 – Biological Assessment submitted to USFWS
- ▶ 2019 – SEIS submitted for COE review



Streams & Wetland Mitigation

Impacts

- ▶ Estimated 42 miles of Jurisdictional Stream
- ▶ 360 Acres of Wetland
- ▶ Purchase mitigation credits
 - Estimated at around \$50 Million Dollars
- ▶ In Project Mitigation
- ▶ Lower Grand Conservation Opportunity Area



The “Road” Ahead

Federal Nexus

▶ USACE

- 404 Permit
- Stream and Wetland Mitigation
 - Mitigation Flexibility & Collaboration
 - Opportunity to intervene in decades long eco-system degradation of prized Lower Grand River Basin, if mitigation credits can be flexibly assessed to align with watershed priorities.
 - Efforts to promote win/wins between Corps, USFWS, EPA, MDNR & MDC are hampered by Corps Regulatory firewall
 - Corps Planning has the expertise to advise where the greatest environmental lift could occur, and soon, to address ongoing and impending disasters in the Lower Grand

▶ USFWS

- Biological Assessment/Biological Opinion January 2020
- Endangered Species (Bat) Mitigation January 2020



The “Road” Ahead

Federal Nexus

NRCS

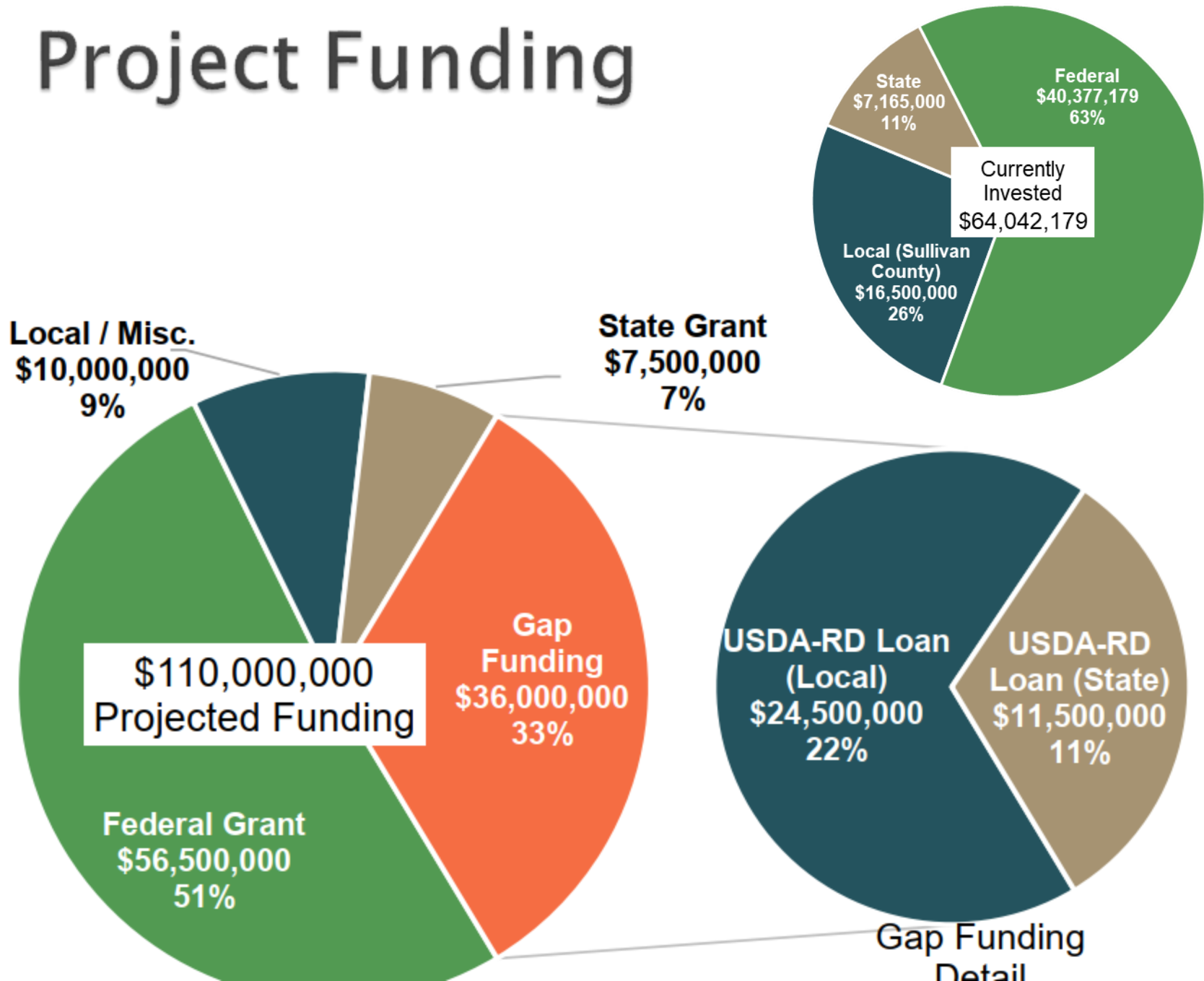
- NEPA - Supplemental Environmental Impact Statement – Record of Decision – Spring 2020
- Federal share of construction funding – over \$40 million
- Authorization to begin Construction Access construction
- Authorization to begin Tree Harvest and Clearing
- Authorization to begin Shoreline Protection construction

USDA-RD

- Loan \$43 million, Grant \$10 million
 - Obligation of funds
 - Approval of Loan & Grant



Project Funding



Little Otter Creek

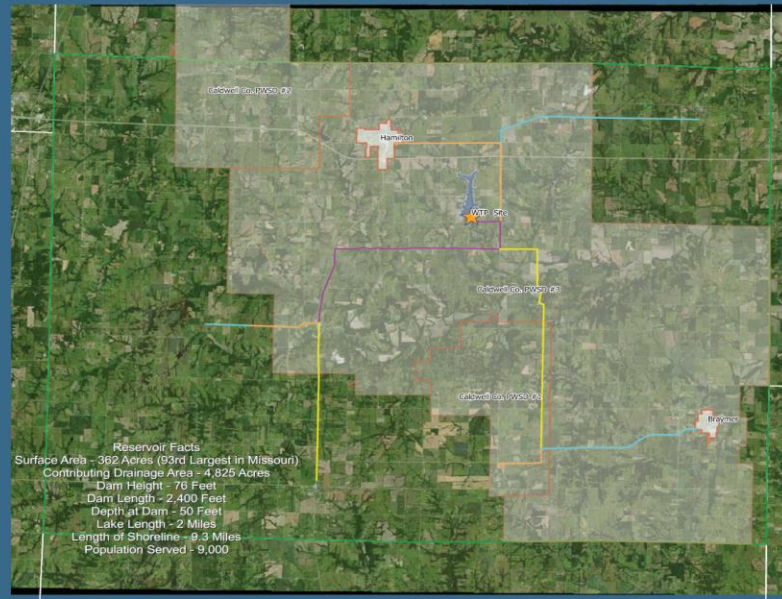
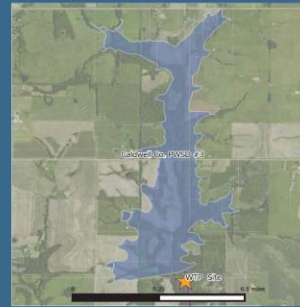


Little Otter Creek Lake Caldwell County, MO

Reservoir Construction:
Caldwell County & USDA-NRCS

Project Purposes

- Provide a dependable long-term water supply to meet a projected 50-year demand for Caldwell County municipalities and residents
- Provide water-based recreation to meet the unmet demand for Caldwell County
- Reduce flood damages on 3.8 miles of Little Otter Creek between County Route 131 and the confluence with Otter Creek



Reservoir Facts
 Surface Area - 362 Acres (3rd Largest in Missouri)
 Contributing Drainage Area - 4,825 Acres
 Dam Height - 76 Feet
 Dam Length - 2,400 Feet
 Depth at Dam - 50 Feet
 Lake Length - 2 Miles
 Length of Shoreline - 9.3 Miles
 Population Served - 9,000

Water Treatment & Distribution:
Little Otter Creek Wholesale Water Commission (LOCWWC)

LOCWWC Members:
 City of Braymer
 City of Hamilton
 Caldwell Co. PWSD #1
 Caldwell Co. PWSD #2
 Caldwell Co. PWSD #3



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Little Otter Creek Reservoir

Little Otter Creek Reservoir

Caldwell County, MO

Projected Permitting Timeline

1/15/2019

	2018		2018	2019											2019
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Supplemental EIS															
USACE Informal Review															
USEPA Informal Review															
Published in Federal Register															
Comment Period															
Public Meeting															
Address Comments															
Final SEIS Availability Published in Fed Reg.															
ROD															
Section 401 Certification and Section 404 Permit															
USACE Informal Review of Section 404 Application															
Formally submitted to USACE															
Comment Period															
Public Meeting															
Address Comments/Negotiate with USACE/MDNR															
Issue Section 401 Certification and 404 Permit															



Our Future!



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