#### **General Project Information**

Project ID: LPL165918

Name: LAKE REDSTONE PROTECTION DISTRICT: LK Redstone 9-Key Element Planning 3-Phase Project - Phase 2

Type: Lakes Grant

Subtype: Large Scale Lake Planning

Status: COMPLETE

**Start Date:** 2/15/2018 **End Date:** 12/31/2021

Purpose: Lake Redstone Protection District will embark upon a 9-Key-Element (9KE) Plan for Lake Redstone. This will be phase 2 of a

3-phase project. This project has the following elements: a) install staff gages and pressure transducers to monitor flow and volume to establish rating curves in tributaries; b) monitor tributary and outlet sites for water quality. These data will contribute to the 9KE plan being written under phase 1 grant, in addition to data collected under an anticipated phase 3 grant.

Project final deliverables include: Water samples will yield data in SWIMs database; tributary loading values will be produced and reported.

Specific project activities include: Water sampling in tributaries to Lake Redstone, and calculating tributary loading values for nutrients and flow.

This scope summarizes the project detail provided in the application and does not negate tasks/deliverables described therein.

If consultant is to provide a final report, it is recommended that Grantee provide DNR Lakes Coordinator with a draft for comment on report adequacy prior to making final payment to the consultant. Data, records, and reports, including GIS-based maps, and digital images, must be submitted to the department in electronic format to the regional Lakes Coordinator along with, or prior to, submission of grantee\2019s final payment request.

Objective:

Comments: Grantee is LAKE REDSTONE PROTECTION DISTRICT

Outcome:

Study Design:

QA Measu	ıres:						
People							
Name		Role	Status	Start Date	End Date	Organization	Comments
Project Statuses							
Date Reported By Status Comments							
Actions			•				

#### **Actions**

Action	Detailed Description	Start Date	End Date	Status
Grant Awarded	Lake Redstone Protection District will embark upon a 9-Key-Element (9KE) Plan for Lake Redstone. This will be phase 2 of a 3-phase project. This project has the following elements: a) install staff gages and pressure transducers to monitor flow and volume to establish rating curves in tributaries; b) monitor tributary and outlet sites for water quality. These data will contribute to the 9KE plan being written under phase 1 grant, in addition to data collected under an anticipated phase 3 grant.  Project final deliverables include: Water samples will yield data in SWIMs database; tributary loading values will be produced and	2/15/2018	12/31/2020	COMPLETE
	reported.  Specific project activities include: Water sampling in tributaries to Lake Redstone, and calculating tributary loading values for nutrients and flow.			

Monitoring Stations						
Station ID	Name	Comments				
573127	Big Creek - Below Dam					
10012315	East Branch Big Creek at Lavalle Road					
10012313	Unnamed Trib at Lake Redstone					
10054211	Unnamed Trib to Redstone Lake at E Redstone Drive					
10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay					
10050314	Unnamed Trib to W Br Big Creek at Daugs Road					
10050315	Unnamed Trib to W Br Big Creek at Lucht Road					
10012316	West Branch Big Creek at Clark Road					
10032044	West Branch of Big Creek at Pfaff Road					

Assessment U	Assessment Units						
WBIC	Segment	Local Name	Official Name				
1280200	1	Big Creek	Big Creek				
1280400	1	Redstone Lake	Lake Redstone				
1280500	1	East Br Big Creek	East Branch Big Creek				
1281000	1	Unnamed Trib to Redstone Lake	Unnamed				
1281100	1	Unnamed NE Trib to Redstone Lake	Unnamed				
1281200	1	West Br Big Creek	West Branch Big Creek				
1281500	1	Unnamed Stream	Unnamed				
1281600	1	Unnamed Trib to W Br Big Creek	Unnamed				

Lab Account Codes				
Account Code	Description	Start Date	End Date	

**Forms** 

Form Code Form Name

**Methods** 

Method Code Method Description

Fieldwork Events							
Start Date	Status	Field ID	Station ID	Station Name			
3/28/2018 13:55	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road			
3/28/2018 14:17	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road			
3/28/2018 14:25	COMPLETE	10050315	10012316	West Branch Big Creek at Clark Road			
3/28/2018 14:48	COMPLETE	10050314	10050314	Unnamed Trib to W Br Big Creek at Daugs Road			
3/28/2018 15:00	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road			
3/28/2018 15:49	COMPLETE	573127	573127	Big Creek - Below Dam			
4/30/2018 10:50	COMPLETE	573127	573127	Big Creek - Below Dam			
4/30/2018 11:25	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road			
4/30/2018 11:55	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road			
4/30/2018 12:10	COMPLETE	10050315	10050315	Unnamed Trib to W Br Big Creek at Lucht Road			
4/30/2018 12:32	COMPLETE	10050314	10050314	Unnamed Trib to W Br Big Creek at Daugs Road			
4/30/2018 12:46	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road			
5/29/2018 9:15	COMPLETE	573127	573127	Big Creek - Below Dam			
5/29/2018 10:01	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road			
5/29/2018 10:38	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road			
5/29/2018 10:55	COMPLETE	10050314	10050314	Unnamed Trib to W Br Big Creek at Daugs Road			
5/29/2018 11:25	COMPLETE	10050315	10050315	Unnamed Trib to W Br Big Creek at Lucht Road			
5/29/2018 11:42	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road			
6/27/2018 9:06	COMPLETE	573127	573127	Big Creek - Below Dam			
6/27/2018 9:39	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road			
6/27/2018 10:13	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road			
6/27/2018 10:29	COMPLETE	10050314	10050314	Unnamed Trib to W Br Big Creek at Daugs Road			
6/27/2018 10:58	COMPLETE	10050315	10050315	Unnamed Trib to W Br Big Creek at Lucht Road			
6/27/2018 11:12	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road			
7/29/2018 9:15	COMPLETE	OUTLET JULY 2018	573127	Big Creek - Below Dam			
7/30/2018 9:47	COMPLETE	LAVALLE RD JULY 2019	10012315	East Branch Big Creek at Lavalle Road			

7/30/2018 10:22	COMPLETE	CLARK RD JULY 2018	10012316	West Branch Big Creek at Clark Road
7/30/2018 10:44	COMPLETE	LUCHT RD JULY 2021	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
7/30/2018 11:07	COMPLETE	DAUGS RD JULY 2020	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
7/30/2018 11:29	COMPLETE	PFAFF RD JULY 2022	10032044	West Branch of Big Creek at Pfaff Road
8/28/2018 11:14	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road
8/28/2018 11:29	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road
8/28/2018 12:00	COMPLETE	573127	573127	Big Creek - Below Dam
8/28/2018 12:29	COMPLETE	10050314	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
8/28/2018 12:39	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road
9/12/2018 9:22	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road
9/12/2018 9:56	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road
9/12/2018 10:19	COMPLETE	10050315	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
9/12/2018 10:39	COMPLETE	10050314	10032044	West Branch of Big Creek at Pfaff Road
9/12/2018 11:01	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road
10/9/2018 9:17	COMPLETE	NA	573127	Big Creek - Below Dam
10/9/2018 10:29	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
10/9/2018 10:52	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
10/9/2018 11:10	COMPLETE	NA	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
10/9/2018 11:27	COMPLETE	NA	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
10/9/2018 11:38	COMPLETE	NA	10032044	West Branch of Big Creek at Pfaff Road
10/30/2018 9:05	COMPLETE	OUTLET	573127	Big Creek - Below Dam
10/30/2018 9:45	COMPLETE	LAVALLE RD	10012315	East Branch Big Creek at Lavalle Road
10/30/2018 10:14	COMPLETE	CLARK RD	10012316	West Branch Big Creek at Clark Road
10/30/2018 10:30	COMPLETE	LUCHT RD	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
10/30/2018 10:48	COMPLETE	DAUGS RD	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
10/30/2018 11:08	COMPLETE	PFAFF RD	10032044	West Branch of Big Creek at Pfaff Road
11/15/2018 9:20	COMPLETE	10012315	10012315	East Branch Big Creek at Lavalle Road
11/15/2018 9:32	COMPLETE	10012316	10012316	West Branch Big Creek at Clark Road
11/15/2018 9:48	COMPLETE	10050315	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
11/15/2018 9:58	COMPLETE	10050314	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
11/15/2018 10:09	COMPLETE	10032044	10032044	West Branch of Big Creek at Pfaff Road
11/15/2018 12:00	COMPLETE	573127	573127	Big Creek - Below Dam
4/26/2019 9:25	COMPLETE	1280200	573127	Big Creek - Below Dam
4/26/2019 10:00	COMPLETE	1280500	10012315	East Branch Big Creek at Lavalle Road
4/26/2019 10:20	COMPLETE	1281200	10012316	West Branch Big Creek at Clark Road

4/26/2019 10:49	COMPLETE	1281500	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
4/26/2019 11:07	COMPLETE	1281600	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
4/26/2019 11:19	COMPLETE	1281200	10032044	West Branch of Big Creek at Pfaff Road
5/31/2019 9:21	COMPLETE	NA	573127	Big Creek - Below Dam
5/31/2019 9:50	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
5/31/2019 10:20	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
5/31/2019 10:43	COMPLETE	NA	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
5/31/2019 11:00	COMPLETE	NA	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
5/31/2019 11:02	COMPLETE	NA	10032044	West Branch of Big Creek at Pfaff Road
6/27/2019 9:44	COMPLETE	OUTLET-BELOW DAM- JUN	573127	Big Creek - Below Dam
6/27/2019 10:17	COMPLETE	LAVALLE ROAD-JUNE 20	10012315	East Branch Big Creek at Lavalle Road
6/27/2019 10:38	COMPLETE	CLARK ROAD-JUNE 2019	10012316	West Branch Big Creek at Clark Road
6/27/2019 10:55	COMPLETE	LUCHT ROAD-JUNE 2019	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
6/27/2019 11:13	COMPLETE	DAUGS ROAD-JUNE 2019	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
6/27/2019 11:22	COMPLETE	PFAFF ROAD-JUNE 2019	10032044	West Branch of Big Creek at Pfaff Road
7/16/2019	COMPLETE	BELOW DAM-OUTLET	573127	Big Creek - Below Dam
7/16/2019 9:15	COMPLETE	NA	573127	Big Creek - Below Dam
7/16/2019 9:58	COMPLETE	LAVALLE ROAD	10012315	East Branch Big Creek at Lavalle Road
7/16/2019 9:58	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
7/16/2019 10:33	COMPLETE	CLARK ROAD	10012316	West Branch Big Creek at Clark Road
7/16/2019 10:33	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
7/16/2019 10:51	COMPLETE	LUCHT ROAD	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
7/16/2019 10:51	COMPLETE	NA	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
7/16/2019 11:16	COMPLETE	DAUGS ROAD	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
7/16/2019 11:16	COMPLETE	NA	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
7/16/2019 11:33	COMPLETE	NA	10032044	West Branch of Big Creek at Pfaff Road
7/16/2019 11:33	COMPLETE	PFAFF ROAD	10032044	West Branch of Big Creek at Pfaff Road
8/20/2019 9:05	COMPLETE	BIG CREEK BELOW DAM	573127	Big Creek - Below Dam
8/20/2019 9:59	COMPLETE	EAST BRANCH BIG CREE	10012315	East Branch Big Creek at Lavalle Road
8/20/2019 10:20	COMPLETE	WEST BRANCH BIG CREE	10012316	West Branch Big Creek at Clark Road

8/20/2019 10:40	COMPLETE	BIG CREEK WEST UNNAM	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
8/20/2019 10:55	COMPLETE	BIG CREEK WEST BRANC	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
8/20/2019 11:10	COMPLETE	WEST BRANCH BIG CREE	10032044	West Branch of Big Creek at Pfaff Road
10/2/2019 9:25	COMPLETE	OUTLET	573127	Big Creek - Below Dam
10/2/2019 9:52	COMPLETE	LAVALLE RD	10012315	East Branch Big Creek at Lavalle Road
10/2/2019 10:04	COMPLETE	CLARK RD	10012316	West Branch Big Creek at Clark Road
10/2/2019 10:11	COMPLETE	LUCHT RD	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
10/2/2019 10:19	COMPLETE	DAUGS RD	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
10/2/2019 10:25	COMPLETE	PFAFF RD	10032044	West Branch of Big Creek at Pfaff Road
10/15/2019 9:18	COMPLETE	BELOW DAM	573127	Big Creek - Below Dam
10/15/2019 9:40	COMPLETE	LAVALLE RD	10012315	East Branch Big Creek at Lavalle Road
10/15/2019 9:51	COMPLETE	CLARK ROAD	10012316	West Branch Big Creek at Clark Road
10/15/2019 9:58	COMPLETE	LUCHT RD	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
10/15/2019 10:18	COMPLETE	DAUGS RD	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
10/15/2019 10:30	COMPLETE	PFAFF RD	10032044	West Branch of Big Creek at Pfaff Road
12/5/2019 9:17	COMPLETE	NA	573127	Big Creek - Below Dam
12/5/2019 9:47	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
12/5/2019 10:02	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
12/5/2019 10:13	COMPLETE	NA	10050315	Unnamed Trib to W Br Big Creek at Lucht Road
12/5/2019 10:26	COMPLETE	NA	10050314	Unnamed Trib to W Br Big Creek at Daugs Road
12/5/2019 10:47	COMPLETE	NA	10032044	West Branch of Big Creek at Pfaff Road
5/29/2020 15:36	COMPLETE	NA	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay
5/30/2020 10:29	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
5/30/2020 10:58	COMPLETE	NA	10054211	Unnamed Trib to Redstone Lake at E Redstone Drive
5/30/2020 11:19	COMPLETE	NA	573127	Big Creek - Below Dam
5/30/2020 11:36	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
6/11/2020 9:30	COMPLETE	NA	573127	Big Creek - Below Dam
6/11/2020 9:50	COMPLETE	NA	10012313	Unnamed Trib at Lake Redstone
6/11/2020 10:10	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
6/11/2020 10:25	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
6/11/2020 10:40	COMPLETE	NA	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay
6/29/2020 12:59	COMPLETE	NA	573127	Big Creek - Below Dam
6/29/2020 13:13	COMPLETE	NA	10012313	Unnamed Trib at Lake Redstone

6/29/2020 13:32	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
6/29/2020 13:43	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
6/29/2020 13:57	COMPLETE	NA	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay
7/28/2020 9:30	COMPLETE	NA	573127	Big Creek - Below Dam
7/28/2020 9:45	COMPLETE	NA	10012313	Unnamed Trib at Lake Redstone
7/28/2020 10:00	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
7/28/2020 10:15	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
7/28/2020 10:30	COMPLETE	NA	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay
8/18/2020	COMPLETE	MARTIN	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay
8/18/2020 15:00	COMPLETE	BIG CREEK	573127	Big Creek - Below Dam
8/18/2020 15:30	COMPLETE	LAVALLE	10012315	East Branch Big Creek at Lavalle Road
8/18/2020 15:45	COMPLETE	SWALLOW	10012313	Unnamed Trib at Lake Redstone
8/18/2020 16:00	COMPLETE	CLARK	10012316	West Branch Big Creek at Clark Road
8/28/2020 10:07	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
8/28/2020 10:20	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
9/21/2020 9:21	COMPLETE	NA	573127	Big Creek - Below Dam
9/21/2020 9:47	COMPLETE	NA	10012313	Unnamed Trib at Lake Redstone
9/21/2020 10:02	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
9/21/2020 10:19	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
9/21/2020 10:37	COMPLETE	NA	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay
10/9/2020 10:12	COMPLETE	NA	573127	Big Creek - Below Dam
10/9/2020 10:33	COMPLETE	NA	10012313	Unnamed Trib at Lake Redstone
10/9/2020 10:44	COMPLETE	NA	10012315	East Branch Big Creek at Lavalle Road
10/9/2020 10:57	COMPLETE	NA	10012316	West Branch Big Creek at Clark Road
10/9/2020 11:13	COMPLETE	NA	10054209	Unnamed Trib to Redstone Lake at bridge crossing near Martin-Meadowlark Bay

Docun	nents
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Documento				
Title	Description	Author	Published	Comments

#### **Budget**

Combined Budgets: Combined WSLH:

Combined Total: \$0.00

#### **Funding**

7/25/2024

Organization	Source	Туре	Amount	Start Date	End Date	