Riverside Technology, Inc.	Nebraska Community Foundation, Inc.
2950 E. Harmony Rd, Suite 390	PO Box 83107
Fort Collins, CO 80528	Lincoln, NE 68501-3107
TIN# 84-0979061	TIN# 47-0769903

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

EIGHTH AMENDMENT

To Agreement between Nebraska Community Foundation, Inc., Platte River Recovery Implementation Program, and Riverside Technology, Inc.

1. **Parties.**
   This is the Eighth Amendment to the Agreement entered into by and between the Nebraska Community Foundation, Inc. ("Foundation") of Lincoln, Nebraska, representing all signatories to the Platte River Recovery Implementation Program ("Program") and Riverside Technology, Inc ("Consultant") dated April 4, 2009. The following persons are authorized to represent the parties through this Agreement: Diane Wilson of the Foundation, Dr. Jerry Kenny of the Program; and Dr. Timothy Martin of the Consultant.

2. **Purpose and Authority**.
   This Eighth Amendment to the Agreement between the Nebraska Foundation and Consultant is being made for the purposes of:

   (1) Approve 2017 Phase III contract compensation of $80,909.80. This budget increase shall be effective as of the date of this Amendment. A maximum Phase III expenditure of $80,909.80 is authorized in the 2017 fiscal year (same as calendar year). These funds are obligated as part of the 2017 Program budget and become available on January 1, 2017.

   (2) Expand the Scope of Work to include 2017 Phase III tasks described in Attachment A.

   (3) Extend the term of the existing contract, executed April 29, 2009, through December 31, 2017.

   (4) Continuation of contract compensation through payment for time and materials "not-to-exceed". Consultant will submit monthly requests for payment including hours and rates as shown in Attachment A. The maximum billable amount for 2017 is $80,909.80.

All other terms of the original agreement remain in effect as originally written.

41 IN WITNESS WHEREOF, the Parties have executed this Agreement.
42
43 Nebraska Community Foundation   Riverside Technology, Inc.
44
45
46
47 By_____   By_____
48 DIANE M. WILSON, Chief Financial and   DR. TIMOTHY C. MARTIN, Vice Pres.
49   Administrative Officer
50
51 Date: _____   Date: _____

52 **ATTACHMENT A:**
53
54 PRRIP WEBSITE SUPPORT, MAINTENANCE AND SYSTEM ENHANCEMENTS

2017

PRRIP WEBSITE SUPPORT, MAINTENANCE AND SYSTEM ENHANCEMENTS

RIVERSIDE

Contents

RIVERSIDE

1.0 OVERVIEW

This document describes the scope of work and level of effort proposed for managing the PRRIP website and database for the calendar year 2017. Riverside Technology, inc. will continue to perform website hosting and maintenance, data management, and protocol management activities as described in the following sections.

RIVERSIDE

2.0 HOSTING, SUPPORT, AND MAINTENANCE

The following sections lists the activities associated with hosting and support.

2.1 Hosting

Hosting activities include both management and continuing hosting tasks.

Virtual Servers

The continued hosting arrangement includes two virtual servers with the following specifications:

Virtual Server One:

- 4GB RAM

- Dual 64-bit Processors

- 0.75 Terabyte (TB) of storage area network space, distributed as follows

    o 25 Gigabyte (GB) Virtual Hard Drive ('C-drive' for System Applications and Data)

    o 0.25 TB Virtual Hard Drive ('D-drive' for application data and databases)

    o 0.1 TB Virtual Hard Drive ('E-drive' for database backups)

    o 0.375 TB for system backup

- Operating System: Windows Server 2008 Web Edition

Virtual Server Two:

- 4GB RAM

- Dual 64-bit Processors

- 150 GB of storage space, distributed as follows

    o 25 GB Virtual Hard Drive ('C-drive' for System Applications and Data)

    o 50 GBVirtual Hard Drive ('D-drive' for Microsoft Office SharePoint Server 2007 search index files and backups)

    o 75 GB for system backup

- Operating System: Windows Server Web Edition

The hosting arrangement includes

- DNS Hosting

- SMTP

- 5 Mbps of synchronous bandwidth (burstable to 100 Mbps)

- Server anti-virus

- Basic Data Center Support, including

RIVERSIDE

- o   Monitoring

- o   Server maintenance

- o   Patch management

- o   Backups

2.2   Server Administration and Maintenance

This task consists of general support activities for the System, including administrative and maintenance tasks for both servers and all components.

2.2.1   PRRIP Website and Database Administration and Maintenance

2.2.1.1   SharePoint Administration

General:

- Manage SharePoint Permissions

- Analyze SharePoint Usage and Activity

- Clean Up, Manage and Configure SharePoint accounts and sites

- Analyze SharePoint content and storage

- Monitor SharePoint trends

- Set up alerts and Enforce policies

- Audit the SharePoint environment

Daily:

- Check the top-level sites of all instances of SharePoint within the program site, to ensure they are reachable.

- Log on to all applicable SharePoint servers (Web Front End, Application, and Database) to ensure they are running properly.

- Check the IIS functionality on the Web Server; ensure that the Web Apps and the Web sites are running. Restart as necessary.

Weekly:

- Monitor SharePoint Disk space usage for the site collection.

- Check the backups for consistent size and proper completion.

- Check for Microsoft Patches relevant to MOSS.

- Archive Event logs, if necessary.

RIVERSIDE

Monthly/Quarterly

- Monthly - Check for Operating System and SQL Patches. Work with hosting vendor to ensure that BIOS and Service Packs are applied properly to the Hardware that is running the environment.

- Monthly – Validate backups. Restore backup to a test environment to ensure that everything is being backed up correctly.

- Monthly – Update Documentation. Check the validity and accuracy of all documentation that is used by the end users, site owners and EDO.

- Quarterly- Check long-term storage needs based on weekly numbers.

- Quarterly-Review security/Change admin passwords

2.2.1.2 GeoServer Administration

The planned activities for the maintenance of the GeoServer software include:

- Monitor the service

- Check for updates and apply patches as necessary

- Upload new data files to geo datastore as needed.

2.2.2 Scientific Data Repository: SQL Databases

For SQL Server databases to perform at optimal levels, a database administrator (DBA) will conduct routine maintenance on each database. Some of these routine database tasks involve rebuilding indexes, checking database integrity, updating index statistics, and performing internal consistency checks and backups.

The planned activities for the maintenance of the SQL database include:

- Apply service packs and patches as they are released

- Run database integrity checks

- Update database statistics

- Reorganize database indexes

- Perform database backups

- Clean up database historical operational data

- Shrink databases as needed

- Clean up leftover files from the maintenance plan

- Monitor SQL Server jobs

- Clean up maintenance tasks as needed

RIVERSIDE

2.2.3 Sentry/Flowlink

The Flowlink Server was decommissioned in 2016. The acquisition of NEDNR streamflow data is now handled through PRRIP servers and SharePoint. Support for the SharePoint (as highlighted in Section 2.2.1.1) includes maintenance of the NEDNR streamflow data download tool.

2.3   System Support

Riverside has subcontracted the hosting service to Front Range Internet Inc., (FRII). FRII will be responsible for providing and maintaining connectivity, physical health of the servers, and backup services. FRII support is 24x7 with a support hotline available to Riverside. Details of the service are included with this document.

Riverside support activities will include the following:

- User account support such as account creation/deletion, password reset, end-user support

- Configuration and functionality additions that can be completed through the standard application UI such as the creation and configuration of sites, document libraries, security groups, etc.

- Simple workflow creation and maintenance using SharePoint Designer with standard workflow activities

- Adding or removing data layers in GeoServer

- Adding gage monitoring in Sentry

Requests that cannot be performed through the applications UI, that require addition coding, or that require an extended amount of time and effort will be reviewed and scoped separately from this support agreement, in cooperation with Headwaters staff. Support requests should typically take less than 4 hours to complete. If a request is estimated to require more than 8 hours, it will be reviewed with PRRIP staff to determine the best approach for scoping and budgeting the activity.

Riverside will provide system and end-user support during business hours of 7:30am to 5:30pm Mountain time, Monday through Friday. After hour support requests and services outages will be handled the next business day. Turn-around time for requests will be as follows:

Type	Effort	Turn around
Simple request	< 2 hours	24 hours
Moderate request	2- 4 hours	48 hours
Complex request	4-8 hours	72 hours
Out of scope	> 8 hours	Negotiated

RIVERSIDE

2.4   Term of Performance

This agreement covers a term of 12 months beginning January 1, 2017 and ending December 31, 2017. Riverside will review costs and submit a proposal for extending the hosting services at least 30 days prior the end of the term.

RIVERSIDE

3.0 PRRIP WEBSITE DATA MANAGEMENT

The scope of work for the Data Management Task is focused on attending to on-going ingest of current protocol data and any other enhancements or changes related to the SDR database. Riverside will provide an estimate of the effort to complete data management requests before beginning any work. Approval of the estimate from PRRIP staff will trigger the work to commence. All data management tasks and requests will be tracked using the SharePoint task list in the **Program Data** website.

RIVERSIDE

4.0 PROJECT MANAGEMENT

Project Management activities for hosting, support, and maintenance include:

- Monthly reviews of hosting provider Service Level Agreement (SLA) performance

- Coordinating Riverside SLA actions

- Monthly status reports

Project Management activities for website system enhancements include:

- Project Oversight

- Task Management

- Conference call meeting attendance

- Weekly time and status reports

RIVERSIDE

5.0 DELIVERABLES

The following list details the deliverables associated with each task described above.

- Maintenance as described in Section 2.

- Documentation for training purposes as well as application maintenance.

- Weekly time and status report detailing the accomplishments of the previous reporting period and the planned activities of the next reporting period. Riverside will notify PRRIP in writing when 50% and 80% thresholds of the budget ceiling have been reached.

RIVERSIDE

6.0 BUDGET

6.1 Maintenance Tasks/Hours Estimates

- Daily Maintenance and monitoring – 2hrs/week

- Weekly system checks – 1 hrs/week

- Monthly system reviews – 2 hrs/month

- Website Assistance/troubleshooting – 5.5hrs/month

Task	Frequency	Hours	Year (hours)
System	Daily	0.25	65
	Weekly	1	52
	Monthly	2	24
	Quarterly	4	16
Support	Monthly	7.5	90
Data Management			80
PM			49
		Total	376

RIVERSIDE

6.2 Estimates for 2017

The 2017 budget for the System Enhancements effort is shown in the table below.

Task	Cost	Description
System Support		
FRII Hosting	$21,594.29	ISP Physical Hosting Cost (Fixed annual)
Maintenance	$37,870.04	Support and Maintenance (T&M)
Data Management	$12,265.60	SDR data maintenance (T&M)
Project Management	$ 9,179.87	Task oversight, reporting, meetings, etc. (T&M)
Total	**$80,909.80**	Contract Ceiling

RIVERSIDE

7.0   2017 LABOR RATES

Staff	Rate per hour	Tasks
Tim Martin	$271.23	Corporate Oversight, Client Communication
Michael Thiemann	$168.47	Project Management, Coordination
Robert Allen	$153.32	Database, Reporting, Sentry, Web Services

RIVERSIDE