

PRRIP – ED OFFICE FINAL 01/09/2012

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

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

THIRD AMENDMENT

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

1. Parties.

This is the Third 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 Third Amendment to the Agreement between the Nebraska Foundation and Consultant is being made for the purposes of:

(1) Approve 2012 Phase III contract compensation of \$165,448.90. This budget increase shall be effective as of the date of this Amendment. A maximum Phase III expenditure of \$165,448.90 is authorized in the 2012 fiscal year (same as calendar year). These funds are obligated as part of the 2012 Program budget and became available on January 1, 2012. Obligated funds not liquidated in a fiscal year will be carried over to the next fiscal year. The Program's Executive Director's Office (ED Office) will issue a Notice to Proceed to the Consultant prior to commencement of 2012 Phase III work.

(2) Expand the Scope of Work to include the 2012 Phase III tasks as described in Attachment A.

(3) Extend the term of the existing contract, executed April 29, 2009, through December 31, 2012.

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



PRRIP – ED OFFICE FINAL 01/09/2012

43	IN WITNESS WHEREOF, the Parties have executed this Agreement.	
44		
45	Nebraska Community Foundation	Riverside Technology, Inc.
46		
47		
48		
49	By	By
50	DIANE M. WILSON, Chief Financial and	DR. TIMOTHY C. MARTIN, Vice Pres.
51	Administrative Officer	
52		
53	Date:	Date:



54 ATTACHMENT A:
55

PRRIP WEBSITE SUPPORT, MAINTENANCE AND SYSTEM ENHANCEMENTS

PRRIP – ED OFFICE FINAL

56

2012

PRRIP WEBSITE SUPPORT, MAINTENANCE AND SYSTEM ENHANCEMENTS

Contents

1.0	Hosting, Support, and Maintenance	3
1.1	Hosting	
1.2	Server Administration and Maintenance	
1.	2.1 PRRIP Website and Database Administration and Maintenance	4
1.	2.2 Scientific Data Repository: SQL Databases	5
1.	2.3 Sentry/Flowlink	
1.3	System Support	
1.4	Term of Performance	7
2.0	Prrip Website System enhancments	8
2.1	Flowlink Server Relocation	8
2.2	SharePoint 2010 Upgrade	
2.3	SSL for Intranet Security	
2.4	Progress Tracking Application	
2.5	SDR Operational Database Conversion	
3.0	Project Management	
4.0	Deliverables	10
5.0	Budget	11
6.0	Schedule	

1.0 HOSTING, SUPPORT, AND MAINTENANCE

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

1.1 Hosting

Hosting activities include both setup and continuing hosting tasks.

Virtual Servers

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



- Monitoring
- o Server maintenance
- o Patch management
- o Backups

1.2 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.

1.2.1 PRRIP Website and Database Administration and Maintenance

1.2.1.1 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, 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 started. 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.



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 getting 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

1.2.1.2 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.

1.2.2 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



1.2.3 Sentry/Flowlink

The planned activities for the maintenance of the Flowlink Server software include:

- · Check for updates and apply patches as necessary
- Monitor Flowlink data transmission into Sentry
- Troubleshoot as necessary

1.3 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:

Туре	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

1.4 Term of Performance

This agreement covers a term of 12 months beginning January 1, 2011 and ending December 31, 2012. Riverside will review costs and submit a proposal for extending the hosting services at least 30 days prior the end of the term.

2.0 PRRIP WEBSITE SYSTEM ENHANCMENTS

The recommended scope of work for the enhancement of the PRRIP Website and Database System is focused on the Scientific Data Repository (SDR), SharePoint Upgrade, and migrating the Flowlink Server.

2.1 Flowlink Server Relocation

Flowlink is the software that gathers data from the Isco stream gages located at Shelton and Lexington. The current Flowlink system is hosted on an aging computer at Riverside. We began hosting this system as an interim solution because of issues with the current version of Flowlink software not working with current SQL and Windows versions. Flowlink has not updated their software to work with the PRRIP servers, so we have been running the system here for over year. In order to retire the current computer, we need to migrate the system to a new virtual server at FRII.

2.2 SharePoint 2010 Upgrade

PRRIP is currently hosted on SharePoint 2007, the current version is 2010 which was released in 2009. While the 2007 version is still supported, it will go end-of-life on 4/10/2012. We will need to upgrade to the current version in order to continue to receive support. PRRIP gets non-profit licensing cost, so it will be *relatively* inexpensive to upgrade the software, but there is significant work in migrating all of the customizations and testing.

2.3 SSL for Intranet Security

The PRRIP Intranet is secured with a username/password authentication scheme, but there is no encryption being performed when the credentials are sent over the internet. This presents a moderate security risk that can be mitigated using SSL for a minimal cost. The SSL certificate is licenses annually for around \$200. The install affects our forms based authentication (FBA) for the intranet and will require careful configuration and testing.

2.4 Progress Tracking Application

This task is for the implementation of new a function that allows for progress tracking and visualization for tasks related to testing various program related hypotheses. I have estimated around 80 hours to implement this function.

2.5 SDR Operational Database Conversion

The original design of the SDR database was intended to create a final repository of Program data. We have found that the new data sheet processes require an additional QA step, which can be facilitated by converting the SDR into an operational database. This requires adding the ability to modify uploaded data directly in the SDR through a web interface.



3.0 PROJECT MANAGEMENT

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

- · Monthly reviews of hosting provider 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
- Bi-weekly status reports

4.0 DELIVERABLES

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

- Documentation for training purposes as well as application maintenance.
- Bi-weekly status report detailing the accomplishments of the previous reporting period and the planned activities of the next reporting period.

5.0 BUDGET

The 2012 budget for System Enhancements effort are shown in the table below.

Task	Cost	Description
System Support		
Hosting	\$19,618.30	ISP Physical Hosting Cost
Maintenance	\$64,440.00	Support and Maintenance
subtotal	\$84,058.30	
Flowlink Upgrade		
VPS - Setup	\$ 125.94	ISP Setup
VPS - recurring	\$ 460.94	ISP Physical Hosting Cost
Move and Configure	\$ 5,500.16	Reinstall software and reconfigure connections
subtotal	\$ 6,087.04	
SharePoint Upgrade		PRRIP is currently hosted on SharePoint 2007, the current version is 2010 which was released in 2009. While the 2007 version is currently still supported, it will go end-of-life on 4/10/2012. We will need to upgrade to the current version in order to continue to receive support.
License	\$ 11,000.00	Estimated license cost based on original purchase price
Upgrade	\$ 26,001.60	Install fresh instance and recreate environment to bring software up to latest version
subtotal	\$ 37,001.60	

SSL Implentation		Implement Security to mitigate risk of password breach.
Certificate	\$ 150.00	SSL certificate supplied by Certificate Authority (CA)
Configuration	\$ 6,231.60	Install and configure system to use HTTPS.
subtotal	\$ 6,381.60	
Progress Tracker App	\$ 8,488.00	Implementation of new a function that allows for progress tracking and visualization for tasks related to testing various program related hypotheses
SDR Operational DB	\$ 16,159.76	Approximately 30 tables or related tables will need to be represented in editable grid views. Some tables, such as Imports, Surveys, Reports, etc., will not be included. Only select individuals should be able to edit data. □
Project Management	\$ 6,875.20	Task oversight, reporting, meetings, etc.
Total	\$ 165,448.90	

6.0 SCHEDULE

Riverside will work with the Program Executive Director's Office to establish priorities and develop schedule for implementing each of the tasks outlined in the previous sections.