

# Planning Matrix for NSF EPSCoR Track 2 RII

## Project at a glance - Major Activities

See Deliverables, Milestones and Resources Document, and proposal for more details

Activity	Year 1	Year 2	Year 3
<b>Management</b>			
Management Team Meetings	Bi-monthly	Bi-monthly	Bi-monthly
Component Group Meetings	Monthly	Monthly	Monthly
<b>Communication and Diversity</b>			
Tri-State Meeting	NV	NM	ID
Tri-State Diversity Committee	X	X	X
<b>Evaluation/Reporting</b>			
Yearly Implementation Plan	X	X	X
External Advisory Committee site visits	1	1	1
Evaluator site visits	3	3	3
Annual/Final Reports to NSF	1	1	1
Summative Evaluation Report to NSF (Ext. Evaluator)	1	1	1
<b>Objective 1: Increased Connectivity</b>			
ID: Formalize IRON plan for S. Idaho	X		
ID: Purchase/install networking equipment: 1-10 GB/s service	X	X	
ID: Purchase/install POP on IRON/aggregate on IRON backbone		X	X
NV: Purchase/install network connectivity upgrades	X	X	X
NV: Purchase/install network monitoring & security software/hardware		X	X
NM: Purchase/install institution gateways and connect to minority campuses	X	X	
NM: Purchase/install integrating and data compression software	X	X	X
<b>Objective 2: Enabling Community-based Climate Science through Model and Data Interoperability Solutions</b>			
<b>Model and Data Interoperability Framework</b>			
Evaluate/select CCA and OpenMI for coupling WRF to surface/hydrologic models	X		
Evaluate/select surface/hydrologic models to couple to WRF	X		
Analysis/design of interface between WRF and surface/hydrologic models	X		
Design/develop/test generic interoperability framework prototypes	Initial Prototype	Operational Prototype	Enhanced Prototype
Develop IRF wrapper code for WRF to couple with surface/hydrologic models		X	
Build coupling software infrastructure for WRF and surface/hydro models		X	
Test model coupling: reproducible test cases; mass/energy conservation			X
Publish reference test cases, software delivery to CSDMS repository			X
<b>Interoperable Data Archive</b>			
Define data/metadata format standards for data products to be archived	X		
Implement CRUD services for management of archive objects in mirrored systems	Initial Prototype	Deployment	
Develop required database/file systems; configure for replication across ID, NV, NM	Initial Prototype	Operational Prototype	Deployment
Develop use cases/specific scenarios using interoperability framework		Initial Prototype	Deployment
Develop/implement interoperability tools supporting data analysis/visualization (HIS, WaterML, OpenMI)	X	X	X
<b>Objective 3: Using Cyberinfrastructure to Integrate Research with Education</b>			
<b>Computation, climate change, CI Training (grads, postdocs, faculty)</b>			
ID participants, national training and workshops; coordinate attendance	X	X	X
Develop/offer customized training in climate modeling and HIS	X	X	X
<b>Develop Middle and High School Educational Materials</b>			
Establish development teams; create portal site for education materials	X		
Develop educational materials	X	X	X
Formative evaluation of educational materials		X	X
Dissemination of educational materials		X	X
<b>Develop Middle and High School Extracurricular CI Activities</b>			
Establish development teams and collaborations	X		
Develop climate change CI activities for partners; fund implementation		X	X
<b>Design/coordinate/advertise/deliver Industry CI Days Program</b>		X	X