

INEL-UI COOP PROGRAM OF MONITORING

11/20/86

Goal

Designation of TR WRC as an official IGBP monitoring site with full range of total ecosystems base line monitoring programs (ie. atmospheric, water, hydrologic, vegetation).

Joint program of research & monitoring co-operated by UI CFWR & INEL.

Internationally recognized programs of ~~rest~~ monitoring

CURRENT SITUATION

UI WRC is located in the middle of the largest W in the lower 48 (2.8m FCRNR)

PRISTINE CONDITIONS

The UI has established a ^{w related} ~~wide~~ research, modest in scope but high quality, including Hornaker, Garton ^{PORELL} OWLS, Ables, Diphon Leonardys - archeologic primitive subsistence patterns Krumpes research W condition indicators (ie human biological & physical).

TR FACILITIES - \$ for ~~com~~ ^{com} that support research.

UI CFWR Q4E has committed to ^w research defining natural conditions for ^{baseline} comparison to determine impacts of mgmt.

Features interdisciplinary research involving expertise from throughout the Univ. (range bit, fisheries, archeology, climatology)

INEL has an outstanding record of baseline monitoring in air, water, + vegetation.
 International involvement.
 Recurrent but short time period samples

FWB is in a position to cooperate + facilitate the

Both organizations desire to tie in to a worldwide monitoring approach, like that of the IGBP.

The lower Big Creek Drainage contains some sensitive sub alpine veg sites, but consists primarily of forest + grasslands 3-8000 ft.

While not the most sensitive, these conditions ~~are~~ probably more typical of uninhabited temperate climates.

Uniqueness - remote, lack of prior disturbance
 Ability for year round resident monitoring is fairly unique.

65 acre private enclave of private land within RNR.

3 streams + Big Creek cross the property
 1st order to 4th order.

INEL + UI have a standing cooperating agreement.

ASSUMPTIONS ABOUT THE FUTURE

Environmental monitoring is becoming a major field of applied science w/ rapidly developing methodologies, instrumentation & scientific organization & accumulating data base.

International concern. ^{with increasing} This trend will continue ~~the~~ value of monitoring data from remote, persistent sites as impacts accumulate in managed areas.

Cooperative approaches to long range regions are in the end the most viable approach to scientific achievement & financial stability of programs.

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A PLAN FOR SEQUENTIAL ACTIONS TOWARDS

Designation of RNR as a Biosphere Reserve will be promoted as an action that would enhance the appeal of the area for research.

First order of business is development of an instrumentation plan for ~~the~~ the joint monitoring of atmospheric, meteorological, hydro climatological,

insure that ~~a systems~~ the measurement & methodological data collection are compatible w/a long range systematic approach.

A plan for the joint training & collaboration of personnel is needed to build the relationships, collegiality & commitment needed for research.

Such as internships, field application testing trips ---

Cost sharing of site development ^{instrumentation} & training of personnel should begin immediately to build program identity. Approx \$15,000 is scheduled for instrumentation pending cooperative plan of monitoring.

Division of Responsibility
Cooperation in instrumentation in INEL would take the lead in R & D of equipment & methodology. UI would take the lead in beta testing ^{field} under remote conditions.

Both organizations have research interests in graduate research support.

A ~~major~~ imp't first step would be a field trip to TR upon completion of a year draft working agreement. The purpose would be to further explore & expand this strategic research vision.

Affiliate faculty appointments

An immediate priority is support, in the form of seed money & cost sharing, in the installation of instrumentation & pilot studies for its calibrations & determination of baseline conditions (water chem, climatological, vegetation etc). The most expedient means would be the implementation of GIS for Big Creek Drainage & veg classification & typing using remote sensing

TRAINING on MOSS

Compilation of human history to document points & amount & types of human disturbance such as mening pack stock grazing.

Range transect data recovery & updating.

WVU