Budget Justification Page

Personnel

The PI Shaw would receive four weeks of summer salary for each year of the project. In the summer period, Shaw would coordinate logistics of data collection in the watersheds and travel to field sites to assist in sensor network installation as well as periodic manual mapping of active stream channels.

The PI Shaw would receive support for 5% of his academic year salary for each year of the project. Shaw would be in charge of project management and data analysis of the project (much of which would take place during non-summer periods) and would assist with any academic year data collection, particularly at the Yellow Barn site.

One graduate student would work with PI Shaw and would be funded 100% summer plus 50% academic year ($20,000 total in the first year). The graduate student would have primary responsibility for data collection in the Yellow Barn and Sleepers River watersheds and any secondary sites in Year 2. The graduate student would also assist with data collection trips to the western watersheds. The graduate student would be involved in data analysis, interpretation, and creation of publications.

One undergraduate researcher would be hired for each summer of the project (First year: $10/hr x 400 hrs = $4000). Undergraduate researchers would assist with the data collection in the Yellow Barn watershed as well as develop a related, independent research question under the guidance of a PI.

All salaries are anticipated to increase at 3% per year.

Fringe benefits are calculated as direct costs in accordance with The Research Foundation for SUNY’s indirect cost rate agreement with the Department of Health and Human Services. Fringe benefits for summary salary are currently 17% for PI Shaw, 16% for graduate students, and 5% for undergraduates. Academic year fringe rates are 16% for graduate students and projected to be 55.7% in 2014 for PI-Shaw. Actual rates in place during the time of the award would be charged.

Supplies & Material

In the first year, money would be used to purchase a new Conductivity data loggers (~$700 each) or to refurbish exiting data loggers. Additionally, a handheld GPS device would be purchased to map active stream channels in small basins (Garmin eTrex 20; $180). Additionally, four professional grade manual rain gages would be purchased to supplement precipitation data from regional meteorological stations at the Yellow Barn site (4 x $30 ea. = $120). Remaining money would cover the cost for maps and field notebooks; copies; batteries; sodium chloride for dilution gaging; and miscellaneous construction materials necessary to install sensor. The $500 for year 2 would be used to replace any supplies broken or lost in year 1.

Travel

In the first year, the travel budget would support travel to research sites. The Yellow Barn watershed is approximately 50 miles from the ESF campus. We anticipate making approximately 6 trips per year from the ESF campus (the PI lives near this site and will in many cases carryout the data collection without requiring travel) at approximately $50 per trip ($300/yr). The
Sleeper’s River site is approximately 600 miles roundtrip from Syracuse. We assume we would made 6 trips in a given year at approximately $300 automobile rental and fuel costs per trip ($1800 total). The two Idaho sites are in relatively close proximity and would only require a single shared flight to reach their general vicinity. PI Shaw and graduate student would likely make at least one trip to Idaho during Yr.1. We assume each airplane ticket would be $500 ($1000 total). We anticipate ground transportation in Idaho will be provide through Co-PI McNamara.

Remaining travel costs would cover food and lodging at the Vermont and Idaho field sites for PI Shaw and a graduate student. This amounts to $1400, approximately 30 person/days at the different field sites.

During the second year of the project, approximately $2000 would be used to permit PI Shaw and a graduate student to attend a national scientific conference. The money would cover conference fees (~$400/PI; ~$200/grad student), air flights (~$400/person), and room and board (~$300/person/3-d stay). The remaining $4000 would be used for travel to field sites. Because the exact field sites we visit in year 2 are still somewhat uncertain, we do n’t have specific details. Because the exact field sites we visit in year 2 are dependent on Year 1, we do not have specific details. However, we anticipate making visits to secondary CZO sites. At least one of these sites would be reached by airplane likely requiring three trips for two people at approximately $500/trip ($3000 total). The remaining funds would likely be spent for driving to a second CZO site and for room and board.

Tuition

Funds are requested to cover the tuition of a graduate students for two years at $11,641 in year 1, and $12,106 in year 2.

Indirect Costs

Indirect costs are calculated in accordance with the Research Foundation for SUNY’s federally negotiated indirect cost rate agreement with the Department of Health and Human Services, which is currently 57% of the Modified Total Direct Costs (MTDC).