LAND USE ORDINANCE INVENTORY FOR THE CUYAHOGA RIVER AREA OF CONCERN (AOC)

JUNE 2008

By The

CUYAHOGA RIVER COMMUNITY PLANNNING ORGANIZATION

ABSTRACT

Problems with flooding, erosion and poor water quality originate with the way the land is used in each community throughout the Cuyahoga River Watershed. The problems can often be initiated by the location and/or the design of development. Political fragmentation, uneven implementation and enforcement of setbacks for watershed features can exacerbate the problems and ultimately leads to uneven protection of our region's natural resources. As a first step towards improving the environmental conditions of the Cuyahoga River Watershed we conducted a land use ordinance inventory for a total of 98 communities. The goal of this project was to assess the progress of local jurisdictions in implementing better site design practices in their land use development codes on a tributary-by-tributary basis. The project territory included the Cuyahoga River AOC and remainder of Cuyahoga County. A total 89 out of the 94 communities were completed in the project. The results of this project have been incorporated into the Chippewa Creek Watershed Balanced Growth Initiative Plan and the Building Better Watersheds Workshops. To date approximately 18 local communities, including mayors, city council and citizens have been presented the status of their community's watershed protection ordinances.

BACKGROUND

Problems with flooding, erosion and poor water quality originate with the way the land is used in each community throughout the Cuyahoga River Watershed. The problems can often be initiated by the location and/or the design of development. Political fragmentation, uneven implementation and enforcement of setbacks for watershed features can exacerbate the problems and ultimately leads to uneven protection of our region's natural resources. This lack of balanced growth has a negative impact on community quality of life, community costs and economic viability.

Development patterns in most Cuyahoga River Watershed communities are the result of numerous individual site planning decisions made over long periods of time. The cumulative effects of these decisions have dramatically transformed the landscape. Development alters the surface of the land by replacing natural cover and native vegetation with rooftops, roads, parking lots, driveways, and sidewalks. The increased impervious cover in the watershed, in conjunction with the loss of natural cover and watershed features alters hydrology by preventing the infiltration of water into the soil and increasing the frequency and volume of stormwater runoff that flows to a stream. In turn, these fundamental changes impact both the water quality and habitat of receiving waters.

Study Area: Cuyahoga River Watershed & Area of Concern

The U-shaped Cuyahoga River basin, located in northeast Ohio, drains 813 square miles and includes 1,220 stream miles spanning parts of 83 local jurisdictions and 6 counties. The Cuyahoga River Basin is often organized into three sections: Upper River (Geauga and Portage Counties, Middle River (Portage and Summit Counties) and Lower River (Summit and Cuyahoga Counties). The Lower Cuyahoga River contains the Area of Concern designation.

The river's headwaters originate in northeastern Geauga County and flow southwest to Akron. The river turns sharply to the northwest at the confluence with the Little Cuyahoga River in northern Akron, and then winds through the Cuyahoga Valley National Park before reaching the City of Cleveland and emptying into Lake Erie. The geo-political complexity of the watershed adds a unique dimension to achieving sustainable improvements in water quality.

Land use patterns vary greatly throughout the Cuyahoga River Watershed. The Upper and Middle River are still relatively healthy with an abundance of wetlands and a State Scenic River designation. The health of the Upper River can be attributed to a low level of urban development and 19,000 acres the City of Akron has preserved for drinking water purposes. Organic and nutrient enrichment, flow and habitat alterations are cited as the primary pollutants or impacts in these reaches, which restricts sections of the river from meeting Ohio EPA's water quality standards. The major sources of these impacts come from channelization, home sewage treatment systems, reservoirs and agriculture.

Cuyahoga River Area of Concern (AOC)

The Area of Concern is the lower 50 miles of the Cuyahoga River and its tributary watershed between the city of Akron and Cleveland. There are 80 communities in the Cuyahoga River Area of Concern (AOC), each of which drains to a tributary or directly to the Cuyahoga River. The Lower River is among the most densely populated and industrialized urban areas in the state. In 1985, the International Joint Commission identified the area from the Ohio Edison Dam to the mouth and the Lake Erie nearshore areas as one of 43 Area of Concerns on the Great Lakes. In 1988, a Remedial Action Plan (RAP) was formed to address pollution problems effecting the Lower River's beneficial use impairments. This includes concerns about the health and habitat of fish and other aquatic life, limited recreation and public access to the river and harbor areas and human health and socio-economic concerns. The primary pollutants or impacts that restrict the Lower River and its tributaries from meeting Ohio EPA's water quality standards include organic and nutrient enrichment, low dissolved oxygen, toxicity, sedimentation, and habitat degradation. Sources of these impacts include combined sewer overflows, urban development and runoff. Twenty-two miles of the Lower Cuyahoga River flow through the Cuyahoga Valley National Park, before entering the 5.6 mile Navigation Channel and discharging into Lake Erie.

MAIN ACTIVITIES: LAND USE ORDINANCE INVENTORY

As a first step towards improving the environmental conditions of the Cuyahoga River Watershed we conducted a land use ordinance inventory for a total of 98 communities. The purpose of this step was to find out what the actual development rules were in each community and where gaps existed. Watershed related ordinances and aspects of NPDES Phase II regulations were focused on in this report. The project territory includes the Cuyahoga River AOC and remainder of Cuyahoga County. The findings of this report should help our organization and partners focus resources on the ordinance gaps and more effectively promote and educate for consistent protection measures watershed-wide.

Goal: The goal of this project is to *assess the progress of local jurisdictions* in implementing better site design practices and NPDES Phase II regulations on a tributary-by-tributary basis.

Objective Steps:

1. <u>Assemble a Technical Advisory Committee (TAC)</u>. A Technical Advisory Committee was convened as part of the planning process. The TAC assisted in forming the parameters of the project, provided input on the types of inventory questions and data that should be collected and helped leverage the project by sharing information, ideas and lessons learned from similar past projects.

Members of the Technical Advisory Committee (TAC) included:

- Cuyahoga County Planning Commission- Carla Regener & Kris Hopkins
- NRCS Rep on the Cuyahoga River RAP Coordinating Committee- Jim Storer
- Cuyahoga SWCD: Todd Houser
- Ohio EPA: Kelvin Rogers

- Summit County Engineers: Dave White
- Summit County Dept of Development & Planning: Susan DeChant
- Enviroscience- Laura DeYoung
- Cuyahoga Valley Regional Council of Governments- Pat Carey
- Countryside Program- Kirby Date
- 2. <u>Identified All the Communities in the Cuyahoga River AOC and Remainder of Cuyahoga County.</u> We used GIS to identify all the communities that intersected or were within the project boundary. A list of 98 communities was created to target in the project. A total of 89 out of the 94 communities were completed in the project inventory. (See Appendix A for list of communities & Appendix B for map of the Cuyahoga River AOC).

Appendix A lists all the communities and tracks their completion with project notes.

- 3. Develop List of Inventory Questions. The inventory list was developed through feedback from TAC to assure the inventoried items are part of model development principles and also complements project partners ongoing work programs. The inventory questions looked heavily at flexible development options, such as conservation development techniques. Riparian and wetland setbacks and many other criteria were inventoried. (See Appendix C for list of Inventory Questions)
- 4. <u>Hired Project Interns.</u> We networked with the Cuyahoga County Planning Commission and Cleveland State University to post internship opportunities. We hired two highly qualified interns to conduct the inventory. The Cuyahoga County Planning Commission, our principle partner on this grant, housed and trained the interns. The interns were Brian Burke and Jennifer Hillman. Brian Burke received his Master of Arts in Environmental Studies / Juris Doctor Joint Degree and his currently employed as an Attorney Advisor. Jennifer Hillman had a Masters in Engineering with an excellent work background and a strong recommendation letter from her past employer. (*See Appendix D- for Internship Flyer*)
- 5. Developed Method of Collecting Data. The vast majority of communities had their ordinances online. This allowed us to quickly analyze their land development codes and complete the inventory questions. The County Planning staff helped the interns develop strategies and search tips when reviewing the online codes. Communities that did not have codes online were contacted by phone and email to send their ordinances. Most of these communities sent their codes free of charge.
- 6. <u>Saved Ordinance Data in Excel.</u> The data was collected and entered into excel spreadsheets. The communities were sorted into their respective watershed. There are a set of 13 spreadsheets for each tributary watershed. Each community has two spreadsheets. The first spreadsheet looks and land development codes. The

second looks at zoning analysis by residential district (See Appendix E- The inventory data is saved to a CD for your reference).

7. Outreach and Education: The results of this project will be shared with the TAC, watershed organization, agencies and coordinators. Thus far the project data has been shared with Kelvin Rogers and Dan Bogoevski at Ohio EPA to assist in their efforts to track community adoptions of NPDES Phase II measures. Also, this data has been incorporated into our Chippewa Creek Watershed Balanced Growth Initiative (BGI) Plan and our Building Better Watersheds Workshops.

To view the Chippewa BGI Plan please visit: http://www.crcpo.org/trans.html

The funding for this project was enough to collect the raw data, more funding is being sought to conduct a thorough analysis.

The BGI Plan and the Building Better Workshops provided us an opportunity to conduct a basic analysis and get the data in front of mayors, city council and citizens. Through these efforts the results of this project have presented to the communities of: Brecksville, Broadview Heights, North Royalton, Oakwood, Macedonia, Sagamore Hills TWP, Northfield, Northfield Center TWP, Hudson, Boston Heights, Boston TWP, Twinsburg TWP, Stow, Silver Lake, Cuyahoga Falls, Richfield, Richfield TWP and Bath TWP.

Next, this data will be incorporated into a Big Creek Watershed Plan were we are working on with the cities of Cleveland, Brooklyn, Brook Park, Parma Heights, Parma and North Royalton.

TIME LINE OF ACTIVITIES

- 1. April 2007- Assemble Technical Advisory Committee
- 2. May / June 2007- Develop project framework with TAC. Ensure the data collected is informative and builds off any existing information, from which conclusions may be drawn.
- 3. June / July 2007- Hire project interns. Two interns were handpicked with consideration to professor recommendations and education background.
- 4. August / September / October 2007- Inventory & Analyze Data
- 5. November / December 2007- Outreach & Education (See Appendix F. for Division of Labor between CRCPO & County Planning)

APPENDIX A

NOTE: *Appendix A* lists all the communities in the project and tracks their completion along with project comments / notes. There are two columns labeled "Ord. Completed" and "Zoning Completed". A #1 in the column signifies data was collected. If the column is blank no data was collected for reasons such as, lack of time, data was lost (i.e. jump drive died) or the community never sent information to be reviewed. Also, the communities of Cleveland and Akron were not assessed. We left these two cities as a last priority should extra time become available. These two communities had rather large and cumbersome land use / zoning codes that would have usurped time away from analyzing other communities where conservation and restoration potential were higher.

Cuyahoga Area of Concern					Incomplete	
	County	Partner Community	Ord. Completed	Zoning Completed	Comments	
1	Cuyahoga	Beachwood	1		will send- jump drive died	
2	Cuyahoga	Bedford	1	1		
3	Cuyahoga	Bedford Heights	1	1		
4	Cuyahoga	Bratenahl	1	1		
5	Cuyahoga	Brecksville	1	1		
6	Cuyahoga	Broadview Heights	1	1		
7	Cuyahoga	Brooklyn	1	1		
8	Cuyahoga	Brooklyn Heights	1	1		
9	Cuyahoga	Brook Park	1	1		
10	Cuyahoga	Cleveland			not a priority	
11	Cuyahoga	Cleveland Heights	1		zoning incomplete	
12	Cuyahoga	Cuyahoga Heights	1	1		
13	Cuyahoga	East Cleveland	1			
14	Cuyahoga	Euclid	1	1		
15	Cuyahoga	Garfield Heights	1		will send- jump drive died	
16	Cuyahoga	Glenwillow	1	1		
17	Cuyahoga	Highland Heights	1	1		
18	Cuyahoga	Highland Hills	1	1		
19	Cuyahoga	Independence	1	1		
20	Cuyahoga	Lakewood	1	1		
21	Cuyahoga	Linndale			no zoning ordinance=no zoning detail	
22	Cuyahoga	Lyndhurst	1	1		
23	Cuyahoga	Maple Heights	1	1		
24	Cuyahoga	Mayfield	1	1		
25	Cuyahoga	Mayfield Heights	1	1		

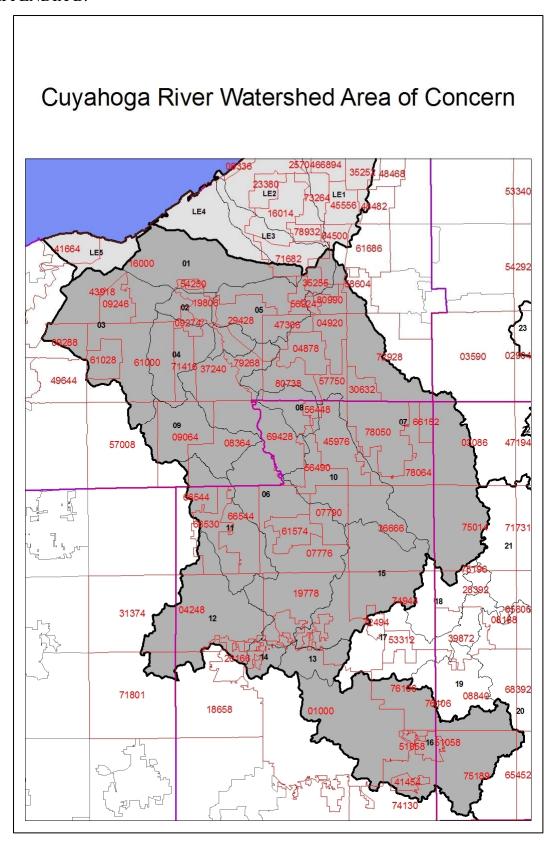
	26	Cuyahoga	Middleburg Heights	1	1	
	27	Cuyahoga	Newburgh Heights	1	1	
	28	Cuyahoga	North Randall	1	1	
	29	Cuyahoga	North Royalton	1	1	
	30	Cuyahoga	Oakwood	1	1	
	31	Cuyahoga	Orange	1	1	
	32	Cuyahoga	Parma	1	1	
	33	Cuyahoga	Parma Heights	1	1	
	34	Cuyahoga	Pepper Pike	1	1	
	35	Cuyahoga	Richmond Heights	1	1	
	36	Cuyahoga	Seven Hills	1	1	
	37	Cuyahoga	Shaker Heights	1	1	
	38	Cuyahoga	Solon	1	1	
	39	Cuyahoga	South Euclid	1	1	
	40	Cuyahoga	University Heights	1		zoning incomplete
	41	Cuyahoga	Valley View	1	1	
	42	Cuyahoga	Walton Hills	1	1	
	43	Cuyahoga	Warrensville Heights	1	1	
	44	Geauga	Bainbridge Township	1	1	
	45	Lake	Willoughby Hills	1		zoning incomplete
	46	Medina	Granger Township	1	1	
	47	Medina	Sharon Township	1	1	
	48	Portage	Aurora	1	1	
	49	Portage	Brimfield Township	1	1	
	50	Portage	Franklin Township	1	1	
51/67		Portage	Mogadore			still sending info- have not received
	52	Portage	Randolph Township	1	1	
	53	Portage	Rootstown Township	1	1	
	54	Portage	Streetsboro	1	1	
	55	Portage	Suffield Township	1	1	
56/78		Portage	Tallmadge	1	1	
	57	Summit	Akron			not a high priority
	58	Summit	Bath Township	1	1	
	59	Summit	Boston Township	1	1	
	60	Summit	Boston Heights	1	1	
	61	Summit	Copley Township	1	1	
	62	Summit	Cuyahoga Falls	1	1	
	63	Summit	Fairlawn	1	1	
	64	Summit	Hudson Village	1	1	

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	65	Summit	Lakemore	1	1	
	66	Summit	Macedonia	1	1	
	68	Summit	Northfield	1	1	
	00	Summi	Northfield Center	<u>'</u>		
	69	Summit	Township	1	1	
	70	Summit	Peninsula		1	Carla to look at Peninsula
	71	Summit	Reminderville	1	1	
	72	Summit	Richfield	1	1	
	73	Summit	Richfield Township	1	1	
	7.4	0 :	Sagamore Hills	4	4	
	74	Summit	Township	1	1	
	75	Summit	Silver Lake	1	1	
	76	Summit	Springfield Township	1	1	
	77	Summit	Stow	1	1	
	79	Summit	Twinsburg	1	1	
	80	Summit	Twinsburg Township	1	1	
	81	Cuyahoga	Bentleyville	1	1	
	82	Cuyahoga	Berea	1	1	
	83	Cuyahoga	Chagrin Falls	1	1	
	84	Cuyahoga	Chagrin Falls Twp.	1	1	
	85	Cuyahoga	Fairview Park	1	1	
	86	Cuyahoga	Gates Mills	1	1	
87/96		Cuyahoga	Hunting Valley	1	1	
	88	Cuyahoga	Moreland Hills	1	1	
	89	Cuyahoga	North Olmsted	1	1	
90/91		Cuyahoga	Olmsted Twp.	1	1	
	92	Cuyahoga	Olmsted Falls	1	1	
	93	Cuyahoga	Rocky River	1		zoning incomplete
	94	Cuyahoga	Strongsville	1	1	
	95	Cuyahoga	Westlake	1	1	
	97	Cuyahoga	Bay Village	1	1	
	98	Cuyahoga	Woodmere	1	1	
			COMPLETED	89	83	
			REMAINING	5	11	
			TOTAL	94	94	

Monroe Falls 1
Kent 1 1

APPENDIX B:



APPENDIX C

LAND USE ORDINANCE INVENTORY QUESTIONS Community ID **Partner Community** County Watershed Comprehensive Plan (last updated or completed) Zoning Analysis by District (e.g. R-1 Residential) 1. Minimum lot size 2. Minimum lot width 3. Minimum front yard (also stated as front building setback) 4. Minimum side yard 5. Minimum rear yard 6. Parking setbacks (pertains primarily to nonresidential and multi-family districts) **Flexible Development Options** 1. Flexible Development Options- (Y or N) 2. Type: Overlay District, Conditional use, Permitted by right, Floating, Unique to Parcel 3. Name: What the community calls it (PUD, PRD, Conservation Development, Compact, Mixed-Use) 4. Minimum project size: typically listed in acres 5. Minimum amount of open space: typically stated as % of total project size 6. Permitted use of open space (ie. Active sports fields, golf course, community buildings, etc.) 7. Miscellaneous open space requirements: minimum size, contiguous acreage, minimum dimensions etc 8. Type of dwelling units permitted: single-family detached, single-family cluster, attached single-family (or townhouses) 9. Method to determine density: Yield Plan, Formula, Minimum Lot Size 10. Maximum dwelling unit density – gross (if stated), (could be calculated from information gathered) 11. Density bonus provided? (Y/N) 12. # of units possible for density bonus 13. Mechanism for gaining density bonus (i.e. increased open space, certain type of preservation - meadow, forested areas etc.) 14. Perimeter setback requirements in which no building or parking is permitted 15. Sidewalks - Provision for one side of the street

16. Additional Comments: (Sewer/Water required, etc)

Wetland Area protection

- 1. Isolated Wetlands Setbacks (Y/N)
- 2. List All categories of Wetlands covered (1,2 & 3)
- 3. Setback Standard
- 4. Wetland & Setback Restricted from ANY changes (e.g. permitted use of lawns, structures, etc.)
- 5. Wetlands Associated with Riparian Setbacks (Y/N)
- 6. List All categories of Wetlands covered (1,2 &3)
- 7. Setback Standard
- 8. Wetland & Setback Restricted from ANY changes (e.g. permitted/prohibited uses lawns, structures, etc.)

9 Riparian Area Protection (Y/N)

- 10. List All categories of streams covered (e.g. intermittent headwater streams, ditches, etc.)
- 11. Setback Standard
- 12. Stream & Setback Restricted from ANY changes (e.g. permitted/prohibited uses lawns, structures, etc.)
- 13. Riparian Overlay
- 14. Riparian Map prepared? (Y/N)
- 15. Setback includes the 100 year flood plain

Variance Procedures

1. Variance Procedures spelled out in ordinance/resolution (Y/N)

Mitigation Required in Ordinances (Y/N)

1. Details if yes

Steep Slope Regulations (Y/N)

% of slope with restrictions - details

Tree Preservation / Protection / Canopy Management Requirements (Y/N)

- 1. Existing trees to be protected during construction (Y/N)
- 2. Woodland areas to be preserved details
- 3. Specimen trees to be preserved details
- 4. Required # of trees post construction details

Groundwater Protection

1.Water Resource Overlay District

LID Requirements:

- 1. Impervious Surface (as stated or determined by setbacks)
- 2. Provision for Minimizing the Disturbance to Natural Site Features
- 3. Street Pavement Width
- 4. Pervious Pavement/Pavers for Parking and Driveways
- 5. Landscaping Requirements for Parking lots, Islands
- 6. Parking Lot (Peak Demand or Avg. Demand)
- 7. Reference to the Rain Water and Land Development Manual

Natural Lawn Ordianance (Y/N)

1. Details of natural lawn ordinance

Other Zoning (i.e. conservation, park districts, etc)

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Illicit Discharge				
Storm Sewers Mapped (Y/N)				
2.Outfalls ID (Y/N)				
3. Are they Inspected? (Y/N)				
Online Code				
Planning and Zoning Information Contact				
Planning and Zoning Information Contact				
Planning and Zoning Information Contact Codified Ordinance Website				

APPENDIX D





PART-TIME EMPLOYMENT ◆ FALL 2007 LAND USE & WATERSHED REGULATION INVENTORY PROJECT

BACKGROUND

The Cuyahoga River Remedial Action Plan (RAP) in conjunction with the Cuyahoga County Planning Commission (CCPC) has openings for two part-time positions for a project to inventory watershed associated regulations. The project is funded by a Lake Erie Protection Fund Grant. The project is an inventory of land development ordinances in approximately 100 communities located in the Cuyahoga River Area of Concern and Cuyahoga County. Funding is available to hire two persons for 20 hours a week for sixteen weeks.

DUTIES:

- Research will include reading through community ordinances to identify specific zoning, subdivision, storm drainage and other environmental regulations.
- Data will be recorded on an inventory spreadsheet, created by project partners.
- Inventory work will primarily be done from the County Planning Commission's offices using internet resources.
- Phone interviews will be conducted with community officials to track down local ordinances and/or verify information.
- A small amount of travel will be required to gather ordinances not available online.
- Direct supervision will be provided by County Planning Commission staff and staff will be available to answer questions and help address concerns as they arise.
- Progress will be reviewed regularly to address needs for modification to the inventory process.

SKILLS & QUALIFICATIONS:

- Have solid working knowledge of land use and zoning regulations as evidenced by a college professor or employee supervisor's written recommendation.
- Be enrolled in or recently graduated from an accredited college or university in urban planning, environmental planning or closely related subject.
- Have strong analytic skills to read and thoroughly interpret land use regulations.
- Have knowledge of conservation type development, NPDES Phase II Storm Water Regulations and other local zoning and watershed issues.
- Demonstrate good oral and written English communication skills.
- Possess good interpersonal skills needed for working on a team project.
- Possess a valid Ohio Driver's license.
- Proficient in Excel and Access.

LOGISTICS & COMPENSATIONS

- Funding is available for two individuals at \$10.00/hr; 20 hours a week for 16 weeks.
- · Mileage will be reimbursed at \$0.485 per mile.
- Project start date is September, 2007.

SUBMIT:

- Resume
- Cover letter or statement of interest in position
- Professor or supervisor recommendations

TO:

Kristin Hopkins, CCPC 323 Lakeside Ave West Suite 400 Cleveland, OH 44113 khopkins@cuyahogacountv.us (216)-443-3700 ph (216) 443-3737 fax

APPENDIX E

See CD for complete inventory data

APPENDIX F

Table: Division of Labor Between CRCPO & CCPC						
Activity	Description	CRCPO	CCPC			
	Maintains grant paperwork; interim and final reports.					
Project Management	Develops project scope of work; Keeps project					
Froject Management	running effeciently and effectively to make sure					
	deliverables are met.	x				
	Develops project scope of work; Keeps project					
Principle Project Partner	running effeciently and effectively to make sure					
	deliverables are met.		X			
	Contacts and assembles working proffessionals who					
Assemble TAC	are knowlegable on watershed regulations and can					
	provide other project support.	х				
Develop List of Assessment	Develops list of questions that will be inventoried					
Questions	watershed-wide. CCPC and TAC will provide input					
Questions	and suggestion to the list.	х				
Select Interns / Day-to-day	Will select qualified interns to implement project. Will					
management	provide interns with office space and needed					
management	resources; provide day-to-day management.		X			
Hire Interns	Officially enroll interns on payroll	x				
	Arranges meeting spaces and times for the TAC					
Meeting logistics	meetings and the interns, CRCPO and CCPC					
	meetings.	x				
	Produces payroll checks, gas mileage					
Project Treasurer	reimbursements, printing and long distance phone					
	call costs	х				