A. Organization, project and contact information

Date of application	06/24/2014
Organization name	East Columbia Neighborhood Association
Organization address	2209 N. Schofield St. Portland OR, 97217
Organization website	ECNApdx.com
Project contact Name	[redacted]
Title	[redacted]
Phone	[redacted]
Email	[redacted]
Fiscal agent If different than the lead organization.	North Portland Community Works
Project partners Provide committed partner organizations.	Bureau of Environmental Services, Multnomah County Drainage District, North Portland Community Works, Portland State University
Potential partners Provide potential partner organizations.	
Project title	Blue Heron Wetland Restoration Project
Project summary Provide a 20-45-word summary that describes your project.	Purpose of funding is to ensure eradication of the noxious weed aquatic primrose (*Ludwigia peploides* ssp. *montevidensis*) from the Blue Heron Wetlands of northeast Portland and further engage the residents of the East Columbia Neighborhood with the natural environment adjacent to their residencies.
Category Under which project category does your project best fit? (Select one only).	☐ Community stewardship in developed areas ☒ **Restoration in natural areas**

Length of project	☐ One year ☒ Two years ☐ Three years
Estimated funding	Estimated amount requested: **$8,900.00** Estimated match funds: **$0.00** Estimated in-kind match: **$37,547.40** Estimated total project budget: **$46,44740**
Pre-application materials	In order to highlight any changes for our review committee, please check below if you have revised or changed the below sections: ☐ Organizational preparedness ☒ Project description: narrative, goals, partnerships ☐ Location and project reach

B. Attachments

Preliminary Application: Organizational Preparedness

The proposed 2014 - 2016 Nature in Neighborhoods (NIN) grant will build upon the infrastructure, relationships and work from the 2011 - 2013 NIN grant awarded to the East Columbia Neighborhood Association (ECNA). The ongoing project has been a success and the aquatic primrose has been reduced to <5% of initial densities in target areas. Successful working relationships with organizations and government agencies are currently in place and knowledge of the target plant has been gained. The ECNA has proved that the work necessary to complete this proposed project can be implemented and carried out.

Currently, the ECNA is working with [redacted], the present Project Coordinator for the Blue Heron Wetland Restoration Project (BHWRP) in creating the project plan. [redacted] is a Master's candidate in the Environmental Science and Management Program at Portland State University and is working with [redacted] (Portland State University), [redacted] (Center for Lakes and Reservoirs), [redacted] Bureau of Environmental Services) and other local environmental professionals to develop a plan for the project throughout the life of the grant. The individuals previously listed all possess backgrounds in habitat restoration, wetland ecology and invasive species management. [redacted] three years of experience working on the BHWRP and has agreed to act as a consultant and contribute numerous hours in contracting work crews and assessing progress. [redacted] has generated a list of active volunteers and has a working relationship with numerous contracting companies. [redacted] of North Portland Neighborhood Services/North Portland Community Works will act as an administrator to disperse funds and provide financial oversight to the project. [redacted] will provide office space within the Kenton Firehouse and necessary administrative material required for outreach and project maintenance.

The ECNA possesses a means of communication with all residents of the East Columbia Neighborhood through newsletters, emails and monthly meetings. Outreach and project updates to this target audience will be carried out through these means. The ECNA will implement and approve of all activity within the property of the Blue Heron Wetlands (BHW) through the elected ECNA board. The elected board has provided approval for the ECNA to apply for NIN grant funds.

The BHW is a private 10-acre plot of land jointly owned by 104 homeowners of the East Columbia Neighborhood. All activity within the BHW is approved by the ECNA board who act as the legal decision makers of the property. There are no permits to be acquired for proposed actions within the BHW.

Preliminary Application: Project Description (narrative, goals, partnerships)

Narrative

In 2009 the BHW experienced an extensive infestation of aquatic primrose (*Ludwigia peploides* ssp. *montevidensis*), a B listed noxious weed in the State of Oregon. The presence of aquatic primrose within the BHW greatly impedes the management goals of the BHWRP for a functioning and biologically diverse wetland. The invasive weed hinders the ability of the BHW to carry out its designed function of flood prevention for the East Columbia Neighborhood. Furthermore, native plant diversity is decreased and open water habitat for wildlife is greatly reduced.

Within Oregon, *Ludwigia peploides* ssp. *montevidensis* has only been observed within the Columbia Slough watershed. Flood waters of the BHW flow in the drainage ditches of Peninsula Drainage District #2 which are then pumped into the Columbia Slough and flow into the Willamette River. With the ability to reproduce through plant fragments, aquatic primrose in the BHW poses a serious threat to establishing new populations. The BHW are upstream to numerous water bodies and act as a source for increased infestations within the system.

Since 2011, control efforts consisting of chemical and manual removal have been applied to the aquatic primrose infestation within the wetlands. With financial assistance from Metro's 2011 NIN Grant, the density of aquatic primrose was reduced by 96% in areas experiencing monocultures. Presently, eradication efforts are focused exclusively on monitoring and hand-removal. The proposed funding seeks to build on the work of the past three years. With a diminished population of aquatic primrose, the project aims to reduce the presence of the weed to <1% of pre-treatment levels, reducing the ecological impact of aquatic primrose within the BHW. This is important to the ECNA due to their previous investment and stewardship to the natural area.

The proposed project will consist of a total of five hand removal events by contractor and the creation of a monitoring program conducted by East Columbia Neighborhood residents. Due to the difficulty of working in wetland environments, fragility of wetland ecosystems and liability issues, volunteers are not a viable option for hand removal of large masses of aquatic primrose in the BHW. Contractors will be hired during the summer of 2015 (3 pull events) and 2016 (2 pull events) to survey and remove large quantities of aquatic primrose *if* present. Over this time, the ECNA will generate interest in a stewardship program that will focus on recruiting a small number of East Columbia residents that would be trained in identification and survey of aquatic primrose within the BHW. The monitoring program would be able to quickly remove small amounts of regrowth before spread occurs. If larger populations are found, the Bureau of Environmental Services will be contacted for consultation or immediate weed removal. The long term stewardship program will increase resident investment in the natural area and ensure no re-infestations of aquatic primrose occur.

The BHW represent 3.5 acres of palustrine wetland habitat and 7 acres of meadow and deciduous forest in the Columbia Slough watershed. The Northern portion of the wetlands is inhabited by deciduous tree species, with numerous sedge, grass and rush species present on the South shore.

Outreach efforts will target the residents of the East Columbia Neighborhood with an emphasis upon the 104 homeowners who communally own the wetland property. The neighborhood newsletter will be used to communicate project updates and progress to the East Columbia Neighborhood Community and provide educational material in order to reduce human conflicts with the natural area. Residents will also be involved in monthly work parties (May to Sept) organized by the ECNA to monitor for aquatic primrose regrowth and remove blackberry, teasel and thistle. Educational material and hands-on interaction with the environment will provide residents with a deeper knowledge of the wetland system and harbor environmental stewardship within the community.

Methods proposed for the project have proven effective in previous work within the BHW and similar eradication efforts elsewhere. Representatives from the USDA recommend hand removal of sparsely infested areas. In the Peconic Estuary of NY, a large infestation of aquatic primrose was removed by hand, totaling 126 yds^3 of removed material that led to complete eradication of the population. Development of the stewardship program will mirror methods similar to those used by The Nature Conservancy in management of natural areas by volunteer.

Goals

Project Goals

1. To reduce the range and density of *Ludwigia peploides* to <1% of pre-treatment levels by fall 2016.

2. To create an active stewards group consisting of East Columbia residents to effectively monitor the BHW for aquatic primrose regrowth and identify management needs.

Relation to Metro NIN Goals

Goal 1: The project restores wildlife habitat by increasing diversity of native vegetation, providing open water habitat for waterfowl, increasing resources for wildlife and improving water quality. A source population of an emerging invasive to Oregon will be removed and degree of spread will be greatly reduced. The project directly addresses Issue 2 (Invasive Species) and Issue 5 (Water Quality and Quantity) contained in the Oregon State Conservation Strategy.

Goal 2: Individuals of the East Columbia Neighborhood will receive in-depth knowledge and hands-on experience within a wetland system. Residents will gain plant identification skills, acquire knowledge involving the importance of wetland components, understand the threat of invasive species and gain the skills needed to organize work groups. By the end of the grant cycle, East Columbia residents will be able to properly monitor the BHW for aquatic primrose and newly colonizing invasives.

The project supports the goals of the ECNA by increasing stewardship in the East Columbia Neighborhood and supporting the natural areas contained within. The ECNA strongly feels that citizen involvement is necessary to preserve the natural environment and conserve diversity for years to come.

Partnerships

Relationships with partnering bodies have been formed through contact by the ECNA board (Table 1). Proposed partners are participating in the project due to shared interests in eradicating aquatic primrose from the Portland Area. Project partners will receive recognition on all printed and publicized material generated throughout the life of the project. To facilitate continued collaboration, an annual meeting with all partners will be organized by an ECNA representative to provide updates and future plans.

Table 1. Relationships and roles of partners with the Blue Heron Wetland Restoration

Organization/Agency	Lead Contact	Role
Bureau of Environmental Services	Mitch Bixby	Provide professional consultation and recommendations for removal and management.
Multnomah County Drainage District	Josh McNamee	Carry out annual site visits and provide recommendations for future activity. Monitor PEN2 ditches and report spread of aquatic primrose into the adjoining system. Provide tools and materials for volunteer events and monitoring.
N. Portland Community Works	Tom Griffin-Valade	Manage project budget and provide office space at Kenton Firehouse for outreach and report writing.
Portland State University	Joseph Maser	Promote volunteer and educational events to students in the Environmental Science and Management Department.

Preliminary Application: Location and Project Reach

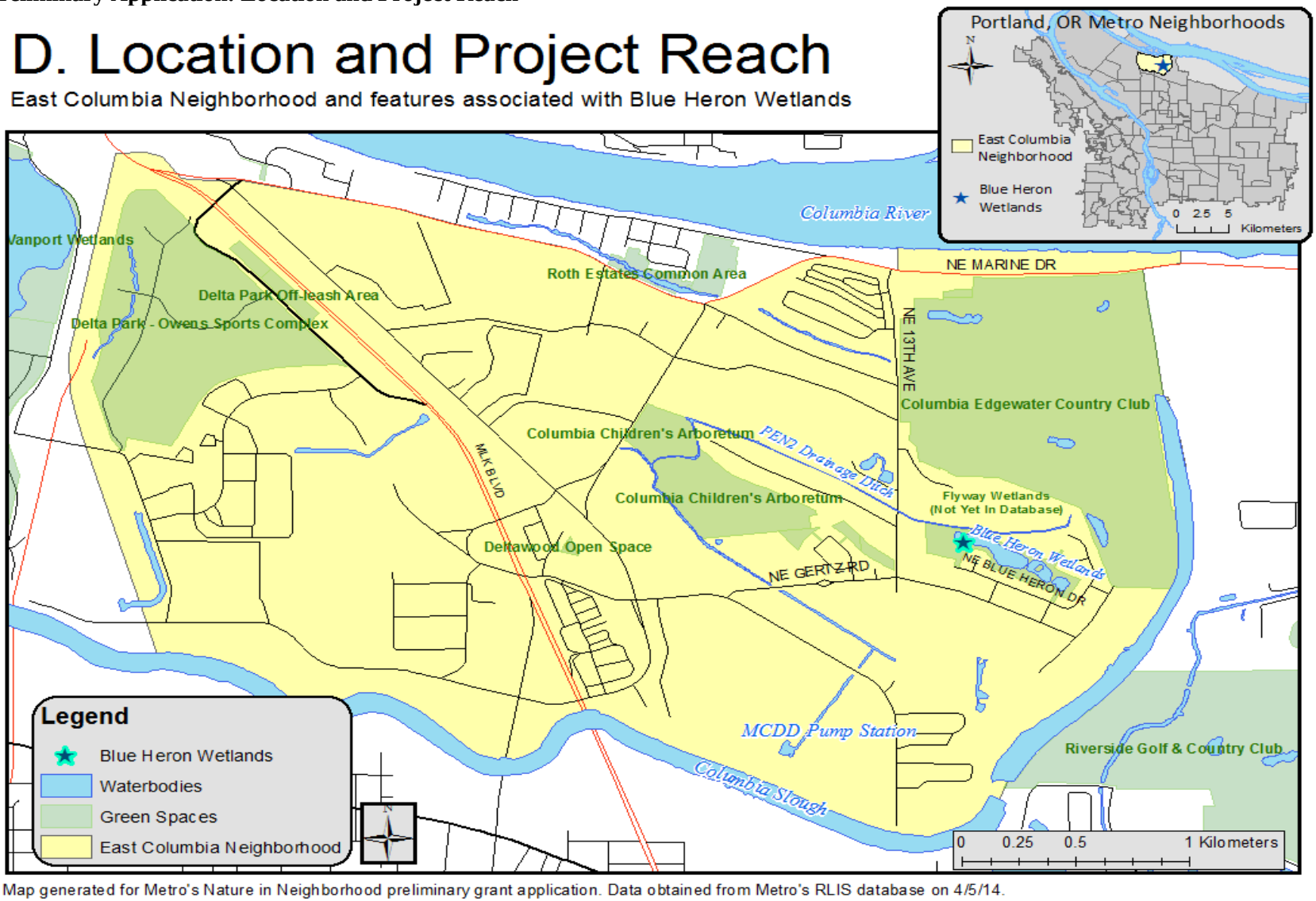


Figure 1. Location map of the Blue Heron Wetlands and associated features within the East Columbia Neighborhood. Data was obtained from RLIS database.

Preliminary Application: Location and Project Reach Cont.

Figure 2. Proximity of individuals to accessible natural areas. Location of the BHW is indicated by the house marker. Map generated from MetroMap. Polygons represent neighborhood boundaries.

The project will benefit the natural areas and waterways of the East Columbia Neighborhood and beyond (Figure 1). Just south of the Columbia River and east of Interstate 5, the East Columbia Neighborhood contains numerous water bodies and natural spaces. Existing within the ancient Columbia Floodplain, the neighborhood is drained and protected from flooding by a series of levees and drainage ditches managed by Multnomah County Drainage District (MCDD). The BHW act as a flood control mechanism for the homeowners on Blue Heron Drive. Run-off from the adjacent residential area is collected in the BHW and flows into the "PEN2 Drainage Ditch" during flood stage. The drainage system flows south to the "MCDD Pump Station" where water is discharged into the "Columbia Slough". By reducing the presence of aquatic primrose in the BHW, the chance of spread to the Columbia Slough and major river systems will be greatly reduced.

Although the ecological benefits of the eradication effort are regional, the impacts to citizens are more local. The East Columbia Neighborhood consists of 740 households representing a population of 1741 residents. By increasing access to the BHW in the form of volunteer events and through the stewardship program, the portion of the East Columbia Neighborhood that is furthest from natural areas will be served (Figure 2). The neighborhood is zoned 60% industrial, 20% residential and 20% open space/farmland. The project will increase the quality of the open space areas within the East Columbia Neighborhood, which is greatly affected by the large presence of industrial activity.

Beyond the East Columbia Neighborhood, the project will contribute to the body of science being compiled in the management of aquatic primrose nationwide. Over the past three years the BHWRP has gained national recognition as a community effort to eradicate an invasive species. Knowledge and experience gained from this project is available online and has been presented at numerous conferences. The 2015 – 2016 NIN grant will continue to contribute to this body of science and equip land managers with the tools they need to eradicate aquatic primrose.

C. Project Budget Worksheet and Narrative

Budget Narrative

Of the $8,900 requested, funds will primarily be allocated to hand removal of *L. peploides* by contractor ($8,400) with a minor request for materials to support neighborhood work parties within the Blue Heron Wetlands ($500). A working relationship has been forged with [redacted] to complete the hand removal efforts. The ECNA has contracted with [redacted] in the past and they have agreed to continue working with the *L. peploides* removal effort into the foreseeable future. The project will schedule [redacted] for three removal events in 2015 and two removal events in 2016. Costs for the services of [redacted] have been estimated based on 2014 hourly rates with a three dollar increase in the price per man hour to account for possible rate increases over the two year life of the project (Figure 3.). Five work parties per year will require supplies to support the volunteers. Posters and signs will be utilized to advertise the events and increase participation within the long term stewardship program involving residents of the East Columbia Neighborhood and adjacent communities.

$$\frac{\$30}{man\ hour}\ x\ 7\ man\ crew\ x\ 8\ hour\ event\ x\ 5\ total\ events = \$8,400$$

Figure 3. Calculation for estimated costs of contractor hand removal by [redacted] for 2015 to 2016.

All project partners are contributing in-kind matches through the form of consultation and active involvement in the project (Table 2.). PSU, BES and MCDD will provide ecological and technical consultation to the ECNA. [redacted] have over 40 years of combined experience in wetland ecology and invasive species management. They will assist the ECNA by providing valuable information regarding eradication methods, scientific monitoring and assist in problem solving unforeseen circumstances. With *L. peploides* being listed as a "Treatment Species" on the City of Portland's EDRR list, [redacted] will work closely with the ECNA to ensure containment and reduction of *L. peploides* to less than 1% of pretreatment levels. Although BES cannot make a commitment to active management at this time, BES will work with the ECNA to utilize best management practices and work towards a situation in which control can be administered by BES if needed. [redacted] will communicate with the Environmental Science & Management Department of PSU to recruit students for volunteer work parties and promote data gained from the monitoring program to academics and land managers.

Fiscal sponsorship and administrative duties will be provided at no charge [redacted] of NPNS/NPCW at an estimated four hours per month. Budgeting and financial reporting will be administered by Tom through NPCW. Furthermore, office space will be available to members of the ECNA within the Kenton Firehouse of N Portland for outreach and reporting. The stewardship program will benefit from the involvement of NPNS/NPCW through priority use of the tools in the North Portland Tool Library. Insurance for volunteers to work within the Blue Heron Wetlands will be covered by NPNS/NPCW.

Surveying and manual pulls of accessible *L. peploides* will occur through volunteers of the ECNA and PSU. Throughout this time, the ECNA will create a Wetlands Sub-Committee to organize the long-term stewardship program to survey for and remove regrowth of *L. peploides* after the proposed funding has expired. Monitoring and field work will be led by [redacted], previous Project Coordinator who will volunteer time to collect data for reporting. [redacted] will also work closely with individuals of the Wetlands Committee to train individuals regarding monitoring and surveying strategies to ensure the stewardship

program is able to independently manage and possibly eradicate the *L. peploides* within the Blue Heron Wetlands. All volunteer hours were estimated by the ECNA Board and is based on previous volunteer hours from the current Blue Heron Wetland Restoration Project (2011 to Present).

Table 2. In-kind contributions from project partners. Hourly rates were based on billable rates.

Metro's NIN Grant In-Kind Match for East Columbia Neighborhood (2015-2016)					
Project Partner	**Contact**	**Contribution**	**Hours**	**Hourly rate**	**In-Kind Match**
Multnomah County Drainage District	[redacted]	Consulting/Site Visits	40	[redacted]	**$1,440**
		Work party supplies			**$200**
Portland State University	[redacted]	Consulting/recruitment of volunteers	40	[redacted]	**$1,714.40**
North Portland Neighborhood Services/ North Portland Community Works	[redacted]	Administrative work/fiscal sponsorhip	96	[redacted]	**$7,200**
		Office Space at Kenton Firehouse			**$6,000**
		Insurance			**$1,000**
		Tools			**$600**
Portland Bureau of Environmental Services	[redacted]	Consulting	40	[redacted]	**$2,788**
Volunteer Hours	**Contact**	**Contribution**	**Hours**	**Hourly rate**	**In-Kind Match**
East Columbia Neighborhood Residents		Volunteer Hours	600	$22.14	**$13,284.00**
Portland State University Students		Volunteer Hours	90	$22.14	**$1,992.60**
[redacted]		Monitoring and Field Work	60	$[redacted]	**$1,328.40**
				Total:	**$37,547.40**

Budget Chart

Table 3. Proposed Blue Heron Wetland Restoration Project budget for 2015 to 2016.

Activity	**Amount requested**			**Match funds** Year 1 must be secured			**In-kind match**	**Total project budget**
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	All years	
Personal services								
Consulting/Volunteer Recruitment - PSU							$1,714.40	$1,714.40
Administrative/Fiscal Work - NPCW							$7,200.00	$7,200.00
Site Visits and workparty support - MCDD							$1,440.00	$1,440.00
Consulting - BES							$2,788.00	$2,788.00
Volunteer labor								
Calculate at $22.14/hour							$16,605.00	$16,605.00
Professional services								
Hand Removal by Contractor	$5,040.00	$3,360.00						$8,400.00
Materials & supplies								
Work party refreshments (5 events/yr)	$175.00	$175.00						$350.00
Printing materials	$75.00	$75.00						$150.00
Trashbags and gloves							$200.00	$200.00
Tools							$600.00	$600.00
Indirect or overhead costs Office Space at Kenton Firehouse							$6,000.00	$6,000.00
Insurance							$1,000.00	$1,000.00
Total	**$5,290.00**	**$3,610.00**					**$37,547.40**	**$46,447.40**

D. Evaluation Measures and Outcomes Reporting

Evaluation Outcomes Narrative

Over the past 3 years of the current eradication process, range and density, species richness, diversity, biomass, percent cover, picture points and volunteer hours have been collected. A great foundation for continued monitoring and pre/post comparison exists. Eradication methods have been successful and information gained from the project has been utilized in other *Ludwigia* control efforts in the region. Within test plots, biomass of *L. peploides* has decreased by 96% in response to chemical application. Due to hand removal in 2013 and 2014, the ECNA expects that monitoring in 2014 will show that the *L. peploides* population was reduced even further.

The eradication effort has been motivated by a select group of East Columbia Neighborhood residents that have successfully worked with numerous professional partners. The ECNA is excited to expand the involvement and responsibility of fellow East Columbia residents in the eradication of *L. peploides* from an area owned by the citizens. Since the *L. peploides* population has been reduced to manageable levels, the ECNA looks forward to putting the final nail in the coffin for this noxious weed.

The story to be told from this project is engaging and inspirational. A community based out of a neighborhood association observed an environmental problem and took it up to themselves to solve it. By applying for grants and finding a graduate student to provide ecological insight at minimal cost, an EDRR species has been treated and an ecological threat has been reduced. Through the actions of the ECNA, adjoining land managers such as MCDD have begun to address their *L. peploides* infestation.

If involvement in the stewardship program is below 5 active individuals, the ECNA will utilize information gathered from this proposed project to improve communication to individuals within the East Columbia Neighborhood for involvement within the BHW. This would involve holding promotional events in specific areas of East Columbia such as the Fox Run Mobile Park or reaching out to the adjacent Bridgeton Neighborhood. Also, BES will be consulted for additional support if the range and density of *L. peploides* is above 1% of initial levels in fall 2016.

Evaluation Measures Chart

Goals	**Goal I:** To reduce the range and density of *Ludwigia peploides* to <1% of pre-treatment levels by fall 2016, with potential for complete eradication.
	Goal II: To create an active stewards group consisting of East Columbia residents to monitor the BHW for *Ludwigia peploides* regrowth and identify management needs.
Strategies	Survey the Blue Heron Wetlands during the growing season for immediate removal of *L. peploides.*
	Target and remove *L. peploides* before seed production occurs.
	Use non-chemical methods to adhere to Integrated Pest Management principles.
	Facilitate environmental stewardship by increasing community access to natural areas.
	Educate and train residents of the East Columbia Neighborhood through interactive events to empower individuals to act independently.
	Create a core of individuals to pass on knowledge and train incoming members to sustain stewardship program.

Activities	Train ECN residents on methods of surveying and weed removal during 2014. *In progress through current monthly volunteer events.* Utilize contractors for hand removal and surveying of *L. peploides* in 2015 to 2016 *3 events in 2015 (May, July, September), 2 events in 2016 (May, September).* Identify **core** individuals for the stewardship group. *4 to 6 ECN residents.* Recruit stewards and volunteers. *Neighborhood newsletters, emails, signage and door-to-door fliers.* Hold monthly work parties to create a consistent and dependable stewards program. *Work party last Saturday of every month (May to September).* Designate a "Wetland Sub-Committee" as a part of the ECNA board to elect representatives. Create written monitoring guide prior to 2015 field season
Project Reach	3.5 acres of intact wetland habitat. Reduction of propagule pressure in the Columbia Slough Basin and adjoining rivers. The target audience includes 1741 residents of the East Columbia Neighborhood Residents that have been most responsive and involved in the current project are retired, mostly Caucasian, mid-income individuals. Regional land managers will be informed of effective control methods for the removal of *L. peploides.*
Data collection tools and method	Total removed biomass. *Will be measure in cubic meters after every volunteer and contractor removal.* *Active ECN residents have collected this data in the past* Changes in density and range. *Acreage and cover classes of L. peploides will be mapped and calculated.* *Will be collected by [redacted] in September of each year using GPS and GIS.* Volunteer involvement *Volunteer hours will be logged and reported.* *Members of stewardship group will self-identify. Member changes will be logged.*
Outcomes	A reduction in density and range of *L. peploides* to levels that are <1% of pretreatment levels. Quantitatively, this number represents .023 acres or 93 m^2. The ECNA has hopes (optimistic, yet realistic) that the species can be completely eradicated. By 2016 it is expected that the weed will be completely eradicated from two of the three ponds, with a small presence in the deepest of the three ponds. Create a long-term solution to the monitoring and removal of *L. peploides* in the BHW through the stewardship program. With such an active and innovative neighborhood, the ECNA expects the stewardship program to grow over time with increased exposure. There is expected to be six to eight members in 2015 and up to 15 in 2016.

E. Scope of Work

Timeline of Events

December 31, 2014	Creation of stewardship document and guide. [redacted]
January 31, 2015	Wetland Committee is created on ECNA board and chair is elected. **ECNA**
April 30, 2015	First meeting of "BHW Stewards". **ECNA** Meeting of project partners. **BES, PSU, MCDD, ECNA** Newsletter, email, signage for Last Saturday work parties. **ECNA** Advertising at PSU for student recruitment. [redacted]
Last Saturday (May to Sept 2015)	Monthly work party within the BHW. **ECNA**
May 31, 2015	Contractor hand removal. [redacted] Site visit by MCDD. [redacted]
July 31, 2015	Contractor hand removal. [redacted]
September 15, 2015	Range and density mapping. [redacted] Site visit by MCDD. [redacted] Contractor hand removal. **Steward group member/**[redacted]
November 30, 2015	Meeting of project partners. **BES, PSU, MCDD, ECNA**
Last Saturday (May to Sept 2016)	Monthly work party within BHW. **ECNA**
May 31, 2016	Contractor hand removal. **Steward group member/**[redacted] Site visit MCDD. [redacted]
September 15, 2016	Range and density mapping. [redacted] Site visit MCDD. [redacted] Contractor hand removal. **Steward group**
October 15, 2016	Meeting of project partners. **BES, PSU, MCDD, ECNA** Evaluation report to Metro. **ECNA**

Project Planning

In order to provide all necessary information and material to the stewardship program, an in depth monitoring and surveying guide will be created to act as a reference for the ECN residents. The guide will be created as part of [redacted]'s thesis defense for his graduate degree at PSU. Information regarding survey techniques, plant identification, removal methods and educational references will be contained within.

Currently, a contact list exists containing all individuals that have participated in volunteer work within the BHW over the past three years. This list will be used by the Wetland Committee to recruit ECN residents for the stewardship program. By doing so, a core group of individuals can start to organize the monthly work parties, beginning with the April 30, 2015 stewards meeting.

It is a short term goal of the project to observe increased participation of ECN residents in the monthly events. The residents that continue to attend volunteer events will be given increased responsibilities

and asked to help train new volunteers in order to harbor a tight knit community group. Another short term goal is to observe a declining trend in removed biomass after contractor pulls and a 90% reduction in *L. peploides* acreage compared to 2012.

Implementation

Pulls by [redacted] will first be organized and managed by [redacted], who has a working relationship with the company. Participants in the stewardship program will be encouraged to help lead the work crews and assist in the removal of *L. peploides* within drier areas. They will then be encouraged to contact and organize crews during the summer of 2016 with guidance from [redacted]

The monthly volunteer events will be led by the Wetland Committee and individuals of the ECNA with assistance from [redacted] As the months go by and as ECN members are more familiar with environmental work, [redacted] will lessen his responsibilities and provide opportunities for individuals of the stewardship group to gain experience and leadership roles. By the end of 2016, there will be an experienced and educated core group of ECN residents composing the stewardship program. With a permanent position on the ECNA board for an individual to represent the Wetland Committee, there will be consistency and longevity within the stewardship program.

The largest threat posed to the wetland habitat by use of volunteers is disturbance and mistaken plant identification. These threats will be reduced through active education during work parties and available educational material. Currently, a monthly "Invasive Species Spotlight" article is printed within the neighborhood newsletter to help residents identify noxious weeds in their community. The monitoring and surveying guide will highlight numerous "look-a-like" native plants to reduce accidental removal. Residents will also be educated on how to reduce their impact when working within a wetland by avoiding specific areas and being conscious of vegetation. A boot brush has been purchased to reduce the immigration/emigration of seeds.

Maintenance

The BHW will be maintained and overseen by the stewardship program and the ECNA. The monthly work parties from May to September will remain intact beyond 2016. Resources provided within the monitoring and surveying guide will contain information of how and where to look for *L. peploides* within the wetlands. With at least a few members of the stewardship program trained from the previous year, surveying for the noxious weed will be both possible and effective. If a growing infestation is found that is too large or accessible for removal, Mitch Bixby of BES will be contacted.

Reporting

The ECNA will author the evaluation report for Metro. Project assessment will be based on the number of volunteer hours derived from ECN residents, number of active steward group members and the range of *L. peploides* within the BHW. The project would be a success if the range of *L. peploides* was <1% (93 m^2) of pretreatment levels or if complete eradication were to occur. It would also be necessary to have the successful long term monitoring program to prevent the rapid regrowth or recolonization of the noxious weed.

Outreach

The ECNA is actively in contact with 740 households representing 1741 individuals within the East Columbia Neighborhood. The ECNA will attempt to contact all ECN residents through the neighborhood newsletter, emails, community events and signage. There are visibly lower income areas within the ECN, such as the Fox Run Mobile Park, in which the ECNA will increase signage and postings to encourage community involvement and environmental education. The ECNA also involves PSU students in volunteer events through communication with [redacted] and postings on the Environmental Science and Management listserve.

F. Additional Photos and Maps

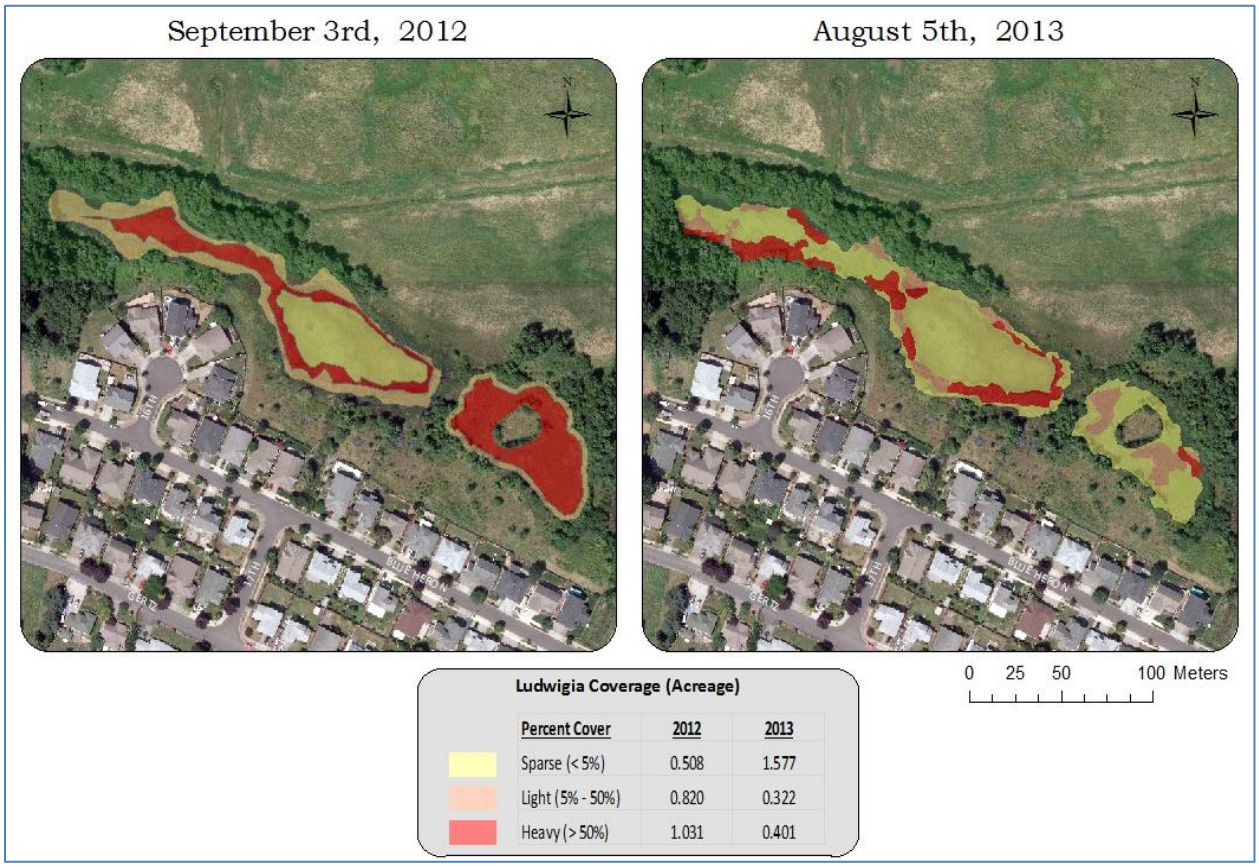
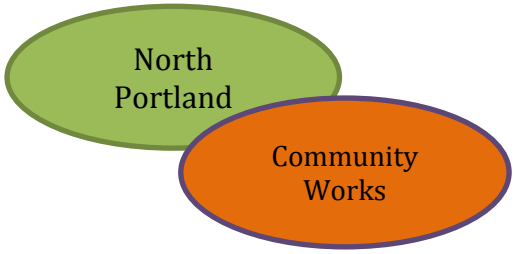


Figure 4. Example of range and density mapping of *L. peploides* infestation within the Blue Heron Wetlands. Comparison illustrates the change in *L. peploides* cover after first chemical application.

June 18, 2012 **August 5, 2013**

Figure 5. Picture point comparison of *L. peploides* infestation within Blue Heron Wetlands before (June 18, 2012) and after (August 5, 2013) first chemical application. *Ludwigia peploides* was still present on bank areas. These areas have undergone additional chemical application and hand removal.

Letters of Support from Active Partners



2209 N. Schofield, Portland, Oregon, 97217
501 (c) (3) Federal Tax # 93-1156762 aka Kenton Action Plan

June 15, 2014

TO: Metro Nature in Neighborhoods Grant Selection Committee Members

FROM: [redacted]

North Portland Community Works (*aka* the Kenton Action Plan) is proud to serve as a partner and to include the Blue Heron Wetlands project as one of our sponsored projects. North Portland Community Works will serve as the fiscal sponsor for the Nature in Neighborhood Grant under consideration.

Thanks to a significant grant from Metro Nature in Neighborhoods along with support from other institutional sponsors, the Portland State University Center for Lakes and Reservoirs, East Multnomah Soil and Water Conservation District, the Multnomah County Drainage District, The Columbia Slough Watershed Council, and the North Portland Trust Fund, this neighborhood grass roots project has not only taken significant strides to restore a significant wetlands, but to build community collaboration. After intensive scientific study and applied methodology, eradication of the invasive *Lugwigia peploides* is now almost complete. Today, with a successful management plan in hand, this grassroots project is taking the next step in the long-term protection of the Blue Heron Wetlands by forming an ongoing grassroots resident powered stewardship group and carrying out contractor pulls that would ensure a reduction and possible eradication of regrowth. Our affiliated staff at North Portland Neighborhood Services will provide administrative support through volunteer hours contributed by [redacted] and office space provided at the Kenton Firehouse for the day-to-day execution of the project.

North Portland Community Works and our affiliated staff at North Portland Neighborhood Services looks forward to preserving this natural habitat in the East Columbia Neighborhood through partnering with and supporting this growing stewardship initiative of the Blue Heron Wetlands.

Portland State
UNIVERSITY

College of Liberal Arts and Sciences
Department of Environmental Science and Management

Post Office Box 751-ESM
Portland, Oregon 97207-0751
SRTC, 218
1719 SW 10th Ave

503-725-4982 tel
503-725-9040 fax
esmoffice@pdx.edu
www.pdx.edu/esm

June 18, 2014

Crista Gardner
NIN Restoration & Community Stewardship Grants Review Committee

Dear Ms. Gardner:

Portland State University (PSU) strongly supports the East Columbia Neighborhood Association (ECNA) in their efforts to eradicate *Ludwigia peploides* from the Blue Heron Wetlands of NE Portland. The project is a shining example of ecological restoration, community involvement and environmental education. Information and experience derived from the project has been utilized by students at PSU and land managers throughout the PNW in controlling *Ludwigia* spp.

Since the ECNA initiated control efforts on the *L. peploides* population in 2011, the presence of the emerging invasive plant has been successfully reduced from its intense infestation levels. No other project in Oregon or Washington has tracked the results of control methods for *Ludwigia* spp. as closely as the ECNA has. Monitoring data from the eradication effort has been shared with researchers and students at PSU along with land managers at conferences and workshops throughout the Pacific Northwest. It is vital to build upon these past efforts with continued control efforts (contractor pulls during 2015 – 2016) and the creation of a long-term stewardship program, to increase the opportunities for full eradication. The proposed project will not only create hands-on experience for PSU students, but could potentially provide the first known example of complete eradication of a *Ludwigia* sp. within the State of Oregon, making this project a model for future eradication efforts.

As a Project Partner, PSU will advertise and support the involvement of students in the Environmental Science and Management Department during volunteer and education events carried out by the ECNA. With over 500 students enrolled in various environmental science programs, PSU represents a valuable resource for volunteer work parties. Personally, with over 30 years of experience in wetland research and consulting, I will provide guidance regarding wetland ecology and environmental policy to the ECNA.

Sincerely,

MCDD Flood Protection

Multnomah County Drainage District #1
1880 NE Elrod Drive Portland Oregon 97211
(503) 281-5675 FAX (503) 281-0392
www.mcdd.org

June 12, 2014

To whom it may concern:

It is my pleasure to write a letter in support of the Blue Heron Wetland Restoration Project being submitted to Metro for the Nature in Neighborhoods Restoration Grant by Alex Staunch and the East Columbia Neighborhood Association (ECNA).

The ECNA is located in a flood plain managed by Multnomah County Drainage District #1 (MCDD). MCDD has played a supporting role working with Alex and the ECNA throughout the Blue Heron Restoration Project. MCDD is actively working to eliminate and monitor infestations of *Ludwigia* in areas of the drainage system that the ECNA's Blue Heron Wetland site drains in to. Continued maintenance to the *Ludwigia* at the Blue Heron Wetland site would contribute to reducing infestations in the adjoining conveyance channels. The Blue Heron Wetland sight is near the top of the conveyance system with outflow affecting multiple conveyance channels including the channels traveling through the Children's Arboretum Park.

MCDD fully supports the efforts of the ECNA and is willing to play a consolatory roll to ECNA's stewardship program regarding the Blue Heron Wetland project including bi-annual site monitoring in collaboration with the stewardship program managers. We would also like to contribute by providing materials and equipment for voluntary events.

Sincerely,

[redacted]

— CITY OF PORTLAND —
ENVIRONMENTAL SERVICES
1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ▪ Nick Fish, Commissioner ▪ Dean Marriott, Director

Metro
Attn: Nature in the Neighborhoods Restoration & Community Stewardship Grants Review Committee
600 NE Grand Ave.
Portland, OR 97232

June 20, 2014

Dear Grant Review Committee,

The City of Portland's Bureau of Environmental Services (BES) is pleased to continue its partnership with the East Columbia Neighborhood Association (ECNA) and to support its proposal for continued management of *Ludwigia peploides* ssp. *montevidensis*.

The City's Early Detection/Rapid Response (EDRR) initiative, implemented by BES, is already on record in support of the *Ludwigia* control being conducted at Blue Heron Wetlands. The project has made substantial contributions to improving water quality in the Columbia Slough while providing an effective education platform for the neighborhood. Three years of management, led by ECNA, have noticeably reduced the density of the *Ludwigia* throughout the wetland complex and raised awareness of the ecological significance of these wetlands and the threat *Ludwigia* poses to other local waterways.

As the project progresses into its middle stages, ECNA is assuming additional key tasks, such as monitoring, and will remove remaining plants in the summer of 2014. For fiscal years 2015 & 2016, the City of Portland's Bureau of Environmental Services (BES) commits to assisting ECNA with key monitoring tasks, though further removal tasks are outside our capacity. Because continued removal is critical to protecting gains already made, it is our hope that Metro will be able to support *Ludwigia* removal efforts in 2015 & 2016.

The pace of progress at Blue Heron Wetlands is laudable and BES lends its strong support of ECNA as it moves to eradicate *Ludwigia* from these wetlands. We welcome continued partnership with Metro towards that end.

Sincerely,

[redacted]

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