

### SECTION 3: APPLICATION FORM

#### A. Organization, project and contact information (two pages maximum)

Please complete the organization, project and contact information below using no more than two pages.

<b>Date of application</b>	March 14, 2014
<b>Organization name</b>	Northwest Zen Sangha, Inc., (dba Dharma Rain Zen Center)
<b>Organization address</b>	2539 SE Madison; Portland, OR 97214-3933
<b>Organization website</b>	<a href="http://www.dharma-rain.org">www.dharma-rain.org</a>
<b>Program contact</b>	
Name	[REDACTED]
Title	[REDACTED]
Phone	[REDACTED]
Email	[REDACTED]
<b>Program partners</b> List all committed partner organizations.	Portland Community College - Southeast Portland State University Madison High School Ecology in Classrooms and Outdoors Jason Lee Elementary School
<b>Potential partners</b> List all potential partner organizations.	Portland Community College - Cascade
<b>Program title</b>	Siskiyou Field Laboratory
<b>Program summary</b> Provide a 20-45-word summary that describes your project.	Five educational institutions will incorporate field studies at a local brownfield into their curriculum. Younger students will restore habitat and perform simple monitoring activities. Older students will develop and apply research questions relating to environmental remediation and ecological restoration. Substantial mentoring across institutions is emphasized.
<b>Category</b> Under which program category does your project best fit? (Select one only).	<input type="checkbox"/> Community Partnerships <input checked="" type="checkbox"/> <b>Environmental Literacy</b> <input type="checkbox"/> Develop Conservation Leaders
<b>Funding</b>	Amount requested: \$ 25,000 Match funds: \$14,700 In-kind match: \$ 55,033 Total program budget: \$ \$94,733

## B. Attachments

Please attach the following documents.

### Pre-application materials (updated or revised, as necessary)

- Organizational preparedness (maximum one page)
- Program description: narrative, goals, partnerships (maximum two pages)
- Location and program reach (maximum two pages)

### Attachments

- Organization 501(c)(3) IRS determination letter, if applicant is not a school or government agency, or the following 501(c)(3) tax-exempt status statement (maximum one page)

"I certify that the above information is correct and that I am authorized by the governing board of this organization to submit this grant application to Metro. Further, I certify that this organization is in good standing with the IRS and retains its official 501(c)(3) tax-exempt status and is further classified as public charity and *not* a private foundation OR qualifies for exempt status as a public school, government agency, or religious institution." *Signed by the executive director or board member.*

- Letter stating permission to use property by land owner or manager, if applicable (maximum one page)
- Five letters of support by active partners (minimum three letters)
- Program budget worksheet and narrative (maximum two pages)
- Evaluation measures and outcomes report (maximum two pages)

## Organizational Preparedness

Dharma Rain Zen Center is transforming a brownfield site into a space for spiritual practice, community connection, and native habitat. As the landowner, and a 501(c)-3 non-profit organization, Dharma Rain Zen Center (DRZC) will be the applicant for the grant. Although the land is owned by a private entity, the entire site will be open and accessible to the public and over a third of the land will be dedicated as natural habitat, so enacting the Siskiyou Field Laboratory will have substantial public benefit. The portions of the site that the Siskiyou Field Laboratory will primarily use are visually and functionally distinct from the temple area, ensuring that the natural areas and the field classroom are truly community resources.

This 14-acre site, at the base of Rocky Butte, on Siskiyou St. one block east of NE 82nd Ave, is part of a larger brownfield that was a former gravel quarry and construction landfill. It was closed over 30 years ago and has been derelict and a source of controversy in the area for much of that time. Extensive Environmental Site Assessments have found the site to be safe for the kinds of work envisioned in this project, and provide baseline data for research envisioned as part of the Siskiyou Field Laboratory. In working to restore a native, resilient ecosystem to the site, Dharma Rain is partnering with many local organizations and schools. Siskiyou Field Laboratory is a cooperative project with Ecology in Classrooms and Outdoors (ECO), Portland Community College (PCC), Portland State University (PSU), Madison High School, and Jason Lee Elementary School.

DRZC's Board of Directors has endorsed both Siskiyou Field Laboratory, and the application to the Metro Council for funding assistance. After purchasing the land a year ago, DRZC has developed partnerships with a number of conservation organizations, as well as engaging the broader community in restoration work on site. DRZC has already organized over 40 volunteer work parties on-site, and has received funding for restoration or remediation work from East Multnomah Soil and Water Conservation District, Environmental Protection Agency, Business Oregon, Tributary Fund and Portland Brownfield Program.

Siskiyou Field Laboratory is a natural outgrowth of DRZC's vision statement that references environmental sustainability. In DRZC classes and workshops, we cultivate awareness and a sense of responsibility for our impact on others and the environment. Harmonious collaboration, conservation of resources, sense of local community, and attunement to sense of place all figure highly as values in Zen Buddhism. In addition, stewardship is a core value for DRZC's youth programs: the "Two Promises" participants make are to understand and to be kind to people, animals and plants.

An ecological steering committee has been formed to be responsible for shaping priorities and advising best practices for site design and habitat restoration. This steering committee has twelve members, and draws on over 260 years of combined professional experience in restoration or ecology. Ten members have been drawn from the broader scientific and habitat management community and two members with similar professional experience are also members of Dharma Rain.

In addition, for the next several years, the duties of the project coordinator, Kakumyo Lowe-Charde, will consist entirely of managing the development and restoration of the site, so he will be available to coordinate the project and help address any needs the Siskiyou Field Laboratory may encounter. He has worked full-time at DRZC for 16 years, is a certified arborist, and has a background in science and environmental advocacy. DRZC staff will be a 24/7 presence on the site, and will play a large role in coordinating restoration activities.

## Program description

Siskiyou Field Laboratory is a program that gives students the ability to take part in lessons and experiments in a natural outdoor setting, and see how the results of their investigations impact the ecology of the area. The site is uniquely suited for this program because of its proximity to educational partners (Jason Lee Elementary and Madison High are less than a half-mile away), the extent of dedicated habitat space, the unique natural history and the impact of the site on the surrounding community. We estimate a total of 1,035 students will be participating over two years.

Six classes (third and fourth graders) from nearby Jason Lee Elementary School will receive 24 classroom ecology lessons and make 12 field trips to the site over two years. These experiences will be facilitated by Ecology in Classrooms and Outdoors (ECO), in conjunction with parent volunteers. During the 2-hr field trips, students will walk 5 blocks to the site and explore the ecology and plant native species. These field trips will empower young students to bring about positive change in their communities, and build pride and ownership amongst the students through their work reclaiming this natural space in their immediate neighborhood. The field trips will dovetail with topics covered in class, allowing students to apply knowledge learned in ECO lessons.

Ninth through twelfth graders in Madison High's Advanced Placement Environmental Studies program (APES) will use the site as a case study in class, and visit the site approximately once a month for the duration of the program. Field activities will include photopoint monitoring, species counts in stable transects, stormwater flow and turbidity measurements, and other data collection activities. These data will be shared in end of year presentations. These activities have already started, and we envision them taking place over a 5-10 year window so that changes over time can be clearly demonstrated. In addition, Madison has a solid record of encouraging community involvement, so students will continue to participate in habitat restoration work outside of class time.

Students in undergraduate science education programs will be engaged as part of PCC's STEM (Science, Technology, Engineering and Mathematics)-related programs at the Southeast campus and PSU's hydrology, geology and biology classes. Some classes will develop research hypotheses that are relevant to the development and restoration of the site and conduct fieldwork to refine or answer these questions. For example, students will model stormwater behavior and measure effectiveness of myco- and phyto-filtration strategies. These studies will directly inform efforts to remediate contamination and protect the aquifer from contaminants leaching from the landfill contents into groundwater. Other students will characterize soil and describe species distribution to guide plant selection and other restoration activities. Undergraduates will also develop a field guide to educate volunteers engaged in restoration efforts that provides clues to recognizing invasive species and newly planted native species that will be found on site. We are working with other groups to create a coherent native species mix throughout the wildlife corridor the site is a part of, so this field guide will be useful for future restoration efforts off-site as well. The program provides an excellent opportunity for students to engage in scientific fieldwork in the local community, helping them see the connections between science, their own lives, and their communities.

Supplemental activities that will be undertaken as part of Siskiyou Field Laboratory include establishing an area that will serve as a meeting space for students and 5 acres of habitat restoration work. The 'classroom' consists simply of a gravel pad and several benches and tables; no structures are envisioned, and it is in the most public portion of the site - over 300' from the religious portion of the site. The classroom will be used for discussions, writing exercises, planning or debriefing fieldwork or experiments and as a base of operations during on-site activities. It will also make it possible for differently-abled students who can't access the entire site to participate. Restoration activities will be largely planned or carried out by students, and restricted to the 4.5 acres dedicated to habitat.

**Goals:** The Siskiyou Field Laboratory will address the Environmental Literacy goals by providing a way for classroom learning to be supplemented with experiential exercises and activities that increase students' understanding of conservation and ecology. The strong local character of the program will make it possible to emphasize community-based learning, engaging the larger community with a problem site, and creating a sense of stewardship for care for it. The results of student experiments will guide the habitat conservation and environmental remediation activities taking place at the site. This provides 'live' content, supporting active learning and teachers' ability to infuse sustainability concepts into existing curricula. Specific structure and content of lessons will align with Next Generation Science Standards and the Oregon Environmental Literacy Plan.

Siskiyou Field Laboratory also helps address goals found within both Metro 2040 and the Portland Comprehensive plan to develop brownfield properties within the Urban Growth Boundary. Additionally, the site is on the intercept of the Outer East Willamette subwatershed, and the Middle Columbia Slough subwatershed. Annual reports on both watersheds call for raising awareness of and involvement in stewardship issues, and planting of native species and habitat conservation.

Success will be evaluated by measuring 1) Number of youth participants, and hours spent at Siskiyou Field Laboratory. 2) Amount and quality of habitat restored. 3) Additional institutions involved in monitoring or restoration activities. 4) Ecological concept knowledge, feelings toward nature, and identification with stewardship values of youth participants.

**Partners:** Our long-term vision is to build on this conservation education pilot program by cementing and expanding collaborative relationships with partnering institutions while continuing to provide opportunities for on-site, hands-on learning opportunities to students and the larger community. Committed partners include Portland Community College (PCC), Portland State University (PSU), Madison High, Jason Lee Elementary, and Ecology in Classrooms and Outdoors (ECO).

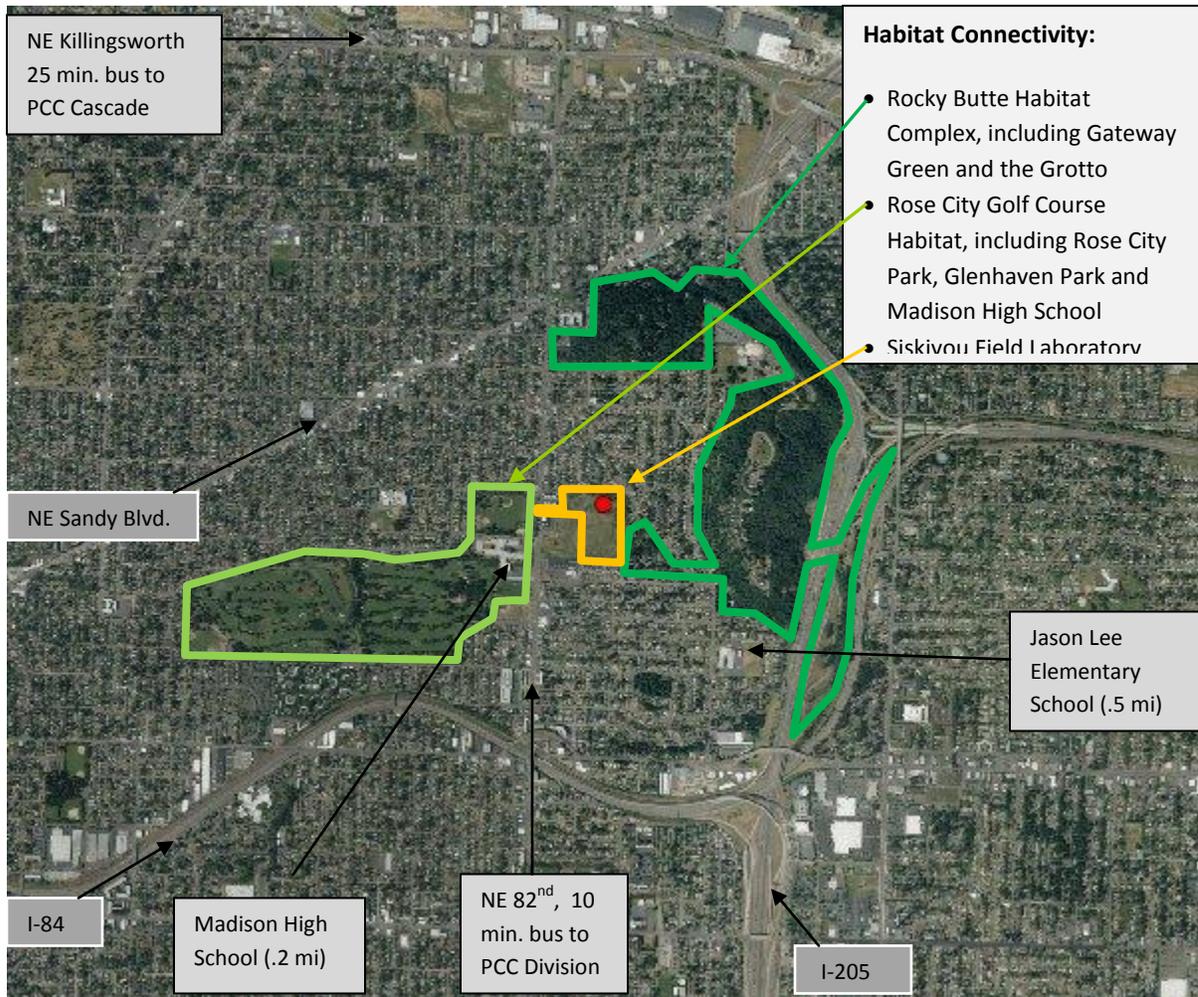
PCC is the largest post-secondary institution in Oregon, serving over 94,000 students on four campuses. Two of these are within a 30-minute bus ride of the site. At this point, only the Division campus is committed, the Cascade campus is a potential partner. PCC students studying earth, environmental, and life sciences will benefit from having easily accessible field sites to use as outdoor laboratories. Faculty will also incorporate sustainability education and service learning into their curricula which they will use in future classes. PCC will provide faculty time, students and materials.

PSU is also an urban campus, with limited opportunities for field-based learning. Consequently, an ongoing relationship with a field site would be an asset for earth, environmental, and life science programs at the university. PSU is both a teaching and research institution and a nationally acclaimed leader in sustainability and community-based learning. These strong emphases allow PSU to bring valuable expertise in addressing site issues to the project.

Madison High School is directly across the street from the site, and the presence of 26 acres of unsupervised land has been a challenge for administrators and teachers trying to keep youth safe and engaged for years. Administration and faculty at Madison have been very involved in planning efforts with DRZC's development on the site, and have already incorporated the site into numerous lessons, over 10 field trips, several days of volunteer restoration work, and engaged several collaborators in support of environmental learning on site.

Jason Lee Elementary School is .5 miles from the site, and features a strong institutional commitment to engagement with the community and to environmental education. ECO is a Portland-based non-profit organization that provides aims to connect students to nature through hands-on exploration of local ecology for elementary students. Programs include multiple classroom lessons, field trips and service-learning opportunities. ECO has received previous funding from Nature in Neighborhoods to support programs at Lent Grade School in SE Portland.

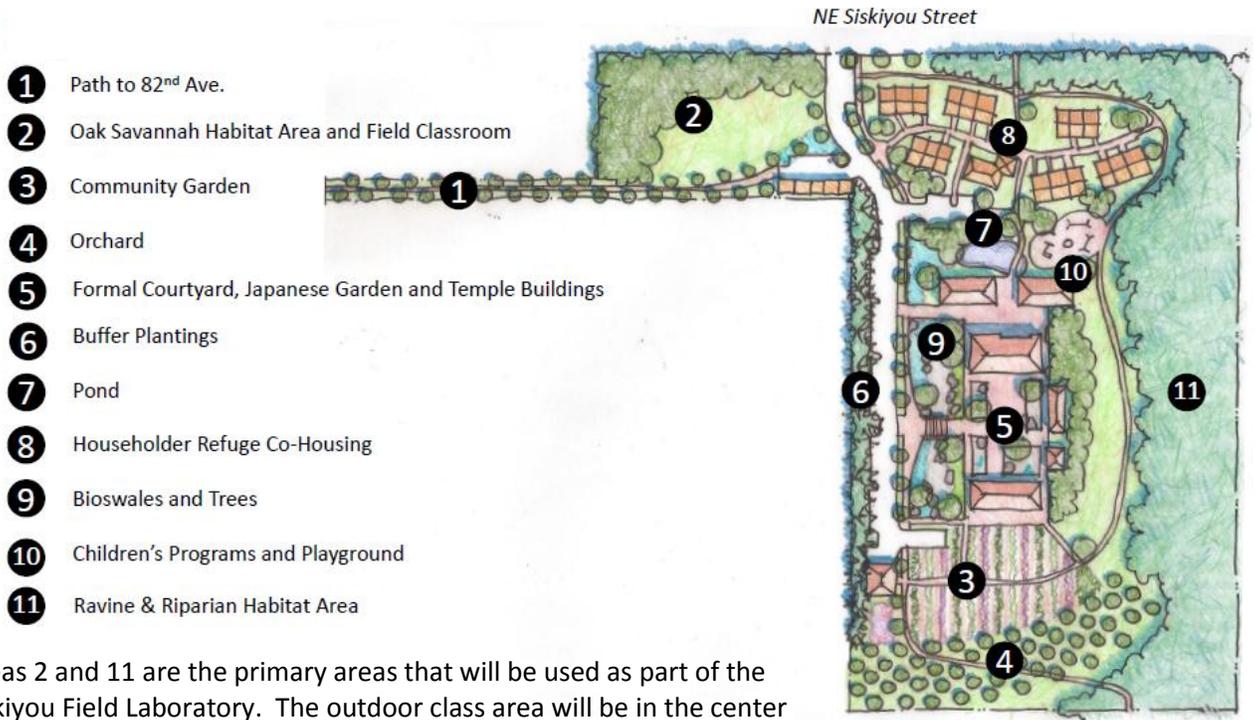
## Location and program reach:



## Demographic Data

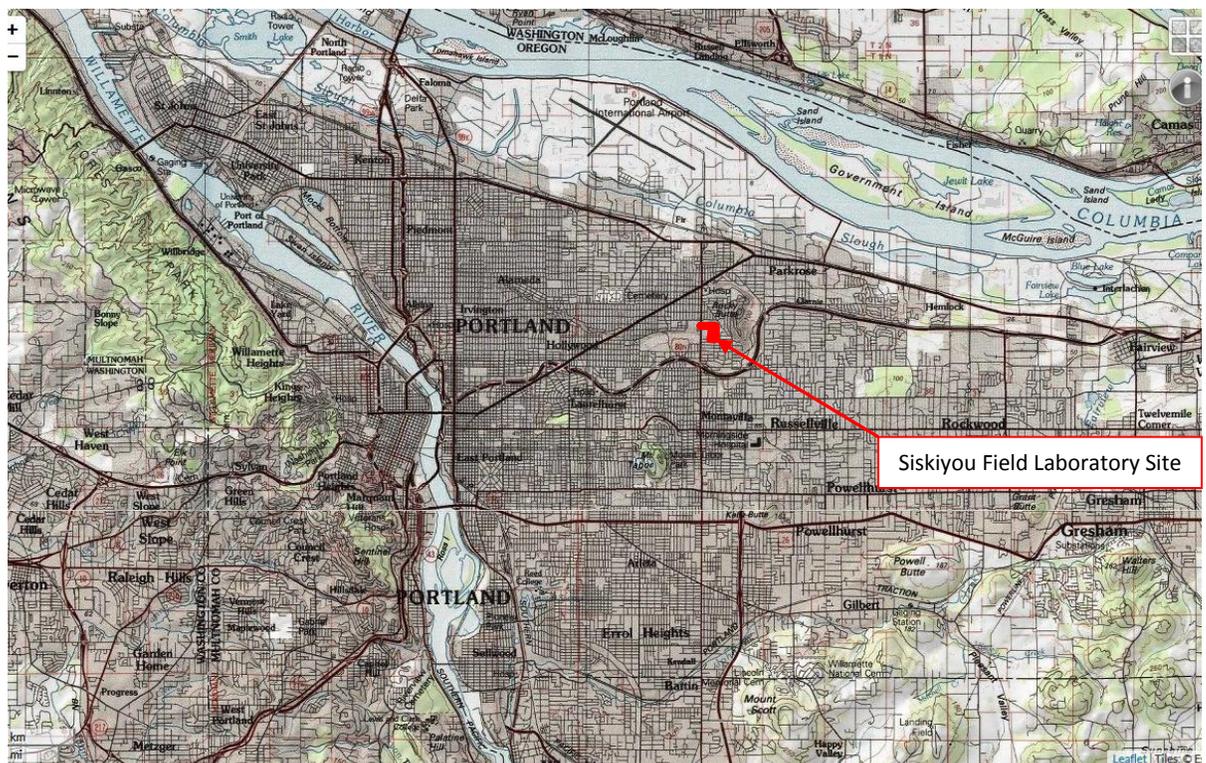
- The neighborhood in which the project is located is economically distressed: The 2010 US Census tract has a poverty rate of 23.5%, and a family income of only 59.5% of the benchmarked median.
- In addition, Portland Public School data show that 77.5% of Jason Lee, and 66.0% of Madison students qualify for free or reduced school lunches, compared to 53.7% of Portland overall.
- The project area is ethnically diverse, with a Diversity Index of 63.8, much higher than the state of Oregon at 38.1, or Multnomah County at 46.9.

## Site Map



Areas 2 and 11 are the primary areas that will be used as part of the Siskiyou Field Laboratory. The outdoor class area will be in the center of area 2, as far as practical from other uses on site, and easily accessible from the street.

## Area Map



## C. Program Budget Worksheet and Narrative

### Personal Services:

1. Metro Request for ECO: 4 lessons x 6 classrooms x \$150/lesson = \$3,600; 2 field trips x 6 classrooms x \$250/field trip = \$3,000.
2. Matching funds from Jason Lee Elementary (JLE) school Parent Teachers Association will provide \$600 for ECO involvement (estimated).
3. In-kind costs for teacher time planning and teaching lessons, field labs, or overseeing restoration work. *Please note that \$50/event is a fantastically low estimate for the in-kind cost PSU, PCC, and Madison High School (MHS) are providing for their staff time.*
  - a. ECO - Curriculum: 6 different plans x \$500 = \$3,000; 24 Classroom lessons x \$50 = \$1,200; 12 Field trips x \$50 = \$600.
  - b. Friends of Trees: 2 days helping with ECO/Jason Lee x \$2,000/day = \$4,000.
  - c. Portland State: 12 lessons and 12 field trips x \$50 = \$1,200
  - d. Portland Community College: 24 lessons and 12 field trips x \$50 = \$1,800
  - e. Madison High: 36 lessons and 12 field trips x \$50 = \$2,400

**Volunteer Labor:** All volunteer time is applied toward the project match. Volunteers are primarily involved assisting with classroom or field trips, restoration activities scheduled outside of normal class time, or special events such as the workshops. *All project planning and administrative support services were counted at the volunteer rate.*

1. Student-focused restoration activities beyond class time: (2) community work days \* 30 volunteers \* 6 hrs = \$7,970. Also (12) focused work projects \* 8 volunteers \* 4 hrs = \$8,501.
2. Project planning and administration: 85 hrs/yr (ECO 25 hrs; DRZC 20 hrs; PSU 5 hrs; PCC 20 hrs; MHS 10 hrs; JLE 5 hrs) \* 2 years = \$3,764
3. Construct benches/tables for outdoor class area: 3 benches (@12 hrs ea) + 2 tables (@20 hrs ea) = \$1,683; Set up outdoor classroom, place gravel: 6 volunteers \* 5 hours = \$664.
4. Chaperones for on-site field trips: 48 total field trips (all institutions together) \* 2 hrs = \$2,058. Chaperones for JLE students are primarily parents; field trips for older student will be assisted by volunteers drawn from partner organizations.
5. Neighborhood field guide for invasive species and recommended natives: 90 hrs = \$1,993.

### Professional Services:

1. Metro request to fund a battery of soil and water tests for heavy metals and petroleum products that are beyond the capacity of student labs: 10 samples \* \$175 each = \$2,100.
2. In-kind workshops to engage participants across institutions (eg., Myco-Remediation, Savanna Forb ID, Animal Tracks & Signs, etc...): (4) workshops\* \$400 each = \$1,600.

### Materials and Supplies:

1. Metro Request:
  - a. Native plant materials for restoration events: 200 BR trees (@\$4); 250 BR shrubs (@\$2); 10 lbs seed (@\$90); 200 1-g shrubs (@\$3); 600 plugs (@\$1). Total = \$3,400.
  - b. Monitoring equipment: 2 GPS units (@\$200); 3 spherical densitometers (@\$100); 2 cameras (@\$150); 8 macroinvertebrate collection kits (@\$50); Misc tools (eg., hand augers, measuring wheel, first aid kit, etc...) \$600; Miscellaneous consumables (eg., sample bags, batteries, dissolved O<sub>2</sub>, etc...) \$800. Total \$2,800.
  - c. Materials for outdoor benches and tables: \$2,100; gravel surface for classes to meet: \$700. No structures will be built. Total = \$2,800.
  - d. Printing of field guide: 500 copies (@\$4 ea.) = \$2,100.
  - e. Pure spawn for mushroom species that remediate petroleum contaminants: \$1,200
2. Match Funds:

- a. An \$18,000 portion of an Environmental Protection Agency grant for environmental remediation. \$4,000 of these funds are being used for savanna habitat restoration, and \$14,000 will be used for contaminant excavation from a seep, both projects that students are already actively involved in. (Secured).
  - b. Funds from East Multnomah Soil and Water Conservation District through both a SPACE grant for savanna restoration: \$1,500; and a PIC grant for ravine restoration: \$8,000 (approximately 20% of the grant involves work that substantially is involving student work). Total = \$9,500. (Secured).
  - c. PCC will contribute supplies for new lab activities: \$300. (Secured).
  - d. Tributary Fund grant for purchasing native seed: \$300. (Secured).
3. In-Kind Match:
- a. DRZC restoration tools (shovels, rakes, gloves, loppers, etc...): \$3,000. (Secured).
  - b. Propagation of mushroom spawn into suitable substrate in sufficient quantity for several demonstration projects/experiments: \$2,500. (Promised).
  - c. Lumber/timber for benches and tables: \$2,000. (Promised).
  - d. ECO binoculars and compasses for field trips: \$1,800. (Secured).
  - e. Laboratory and field equipment and supplies from schools: Madison High: \$1,500. PCC and PSU: \$1,200 each = \$3,900 total. (Secured).

**Other:** Metro request to provide funds for small stipends that will encourage faculty participation. \$1,000/year for both PSU and PCC: Total = \$4,000.

**Indirect or Overhead Costs:** Travel, indirect and overhead costs were not calculated.

**BUDGET CHART**

Activity	Amount requested	Match funds	In-kind match	Total program budget
<b>Personal services</b>	\$6,600: ECO	\$600: PTA	\$4,200: ECO; \$4,000: FOT; \$2,400: MHS; \$1,800: PCC; \$1,200: PSU	\$20,800
<b>Volunteer labor</b> Calculate at \$22.14/hour			\$16,471: restoration work \$3,764: project planning \$2,347 outdoor classroom \$2,058: chaperones \$1,993: field guide for site	\$26,633
<b>Professional services</b>	\$2,100: Laboratory testing of soil and water samples		\$1,600: Guest workshops	\$3,700
<b>Materials &amp; supplies</b>	\$3,400: Plant materials \$2,800: Monitoring equipment \$2,800: Outdoor class \$2,100: Printing \$1,200 Mushroom spawn	\$4,000: EPA site environmental \$9,500: EMSWCD restoration \$300: PCC Supplies \$300: Tributary Fund	\$3,000: DRZC equipment \$2,500: Vendors \$2,000: Lumber \$1,800: ECO equipment \$1,500: MHS lab supplies \$1,200: PCC lab supplies \$1,200: PSU lab supplies	\$39,600
<b>Other:</b>	\$2,000: PSU stipends \$2,000: PCC stipends			\$4,000
<b>Total</b>	\$25,000	\$14,700	\$55,033	\$94,733

## D. Evaluation Measures and Outcomes Reporting (two pages maximum)

### EVALUATION OUTCOMES NARRATIVE

The success of the Siskiyou Field Laboratory will be evaluated by measuring four program areas:

1. *Number of youth participants, and hours spent.*

At the core, this proposal is about nurturing school-age youth's relationship with the natural world. Understanding who is impacted and by what activities will be important for drawing conclusions. To help with this, faculty will receive a biannual survey to record how many students were involved, what courses were involved, what learning topics were covered, and what monitoring, restoration, or experimental activities were engaged in while the class was on-site. DRZC staff will compile this data. We expect to involve at least 80 different students from JLE, 200 from MHS, 100 from PCC and 50 from PSU, for a total of 430 unique students over the two year period.

2. *Amount and quality of habitat restored.*

We are interested in measuring whether student involvement effectively supported the conservation mission of Dharma Rain and Metro's Nature in the Neighborhood program. This information will be gathered primarily through regular qualitative site evaluations by DRZC staff and members of the Ecological Steering Committee to monitor progress.

In addition, classes conducting ecological monitoring or environmental characterization of the site will compile, analyze, and summarize their data and share it with DRZC staff. This will involve many different metrics, but we hope to be able to show significant improvements in habitat quality, habitat quantity, site toxicity, and stormwater management over the two year study period - especially since significant baseline data has already been collected. A key goal for this portion is to establish standardized monitoring protocols so that the classes in subsequent years can gather comparable data.

Finally, DRZC staff will log student volunteer labor hours spent on restoration work. Success would consist of exceeding the 744 volunteer hours accounted for in the budget.

3. *Additional institutions involved in monitoring or restoration activities.*

We hope to expand our coalition of partners beyond this original group. We see this as a pilot project that will provide a gateway for additional instructors, departments, programs and institutions to become involved. The same bi-annual participant survey as in #1 (above) will also be used to gather information about new collaborators, how they became involved, what did they do, and how their involvement supported their institutional goals. Our goal is to have at least three additional faculty members, and one additional institution, involved by the end of the two-year pilot project. The long-term goal is to see this program continue independently, with institutions sharing resources and data collaboratively.

4. *Ecological concept knowledge, attitude toward nature, and identification with stewardship values.*

All student participants will receive a short questionnaire before and after their involvement with the Siskiyou Field Laboratory. The first part of the questionnaire will ask several questions to assess student's understanding of course concepts as they relate to the field site. This portion of the questionnaire will be designed by faculty for each individual course/grade and will provide a measure of how effective the program was in supporting the instructional goals of each institution.

The second portion of the questionnaire, developed by DRZC staff, will assess attitudes towards nature, sense of place, interest in stewardship, and self-assessment of ability to contribute to conserving or restoring environmental systems. This will provide a measure of how the program may impact future behavior of participants, especially in relation to conservation and stewardship. The hypothesis is that there will be an increase in both concept knowledge (the first portion), and in positive feelings, values and intentions having to do with conservation and stewardship of natural areas (the second portion). Finding a statistically significant positive change in each of these two portions of the questionnaire over the course of a student’s involvement with the Siskiyou Field Laboratory will be considered a programmatic success.

Finally, DRZC staff will conduct several focus groups with interested youth participants. The aim here is a more in-depth, qualitative assessment of impact of the program on attitudes towards nature in participating students.

Looking with a broader, longer-term perspective, the Siskiyou Field Laboratory will be considered a success if professional relationships between faculty members across partner organizations are increased and strengthened to a degree that they are sustainable; and if values among students are shifted towards a greater appreciation of, respect for, and responsibility to our natural areas. If both of these goals are met, then the benefits of this proposal will extend far beyond the restoration of this specific site, as participants carry the lessons learned and the bonds formed with them through their lives.

#### EVALUATION MEASURES CHART

<b>Goals</b>	Category II: Environmental Literacy – Supplement existing classroom environmental education with field studies and restoration work of a local brownfield, integrating meaningful, place-based lessons and experiments, so that students can see how the data they collect and the work they do affects their environment.
<b>Activities</b>	Total classroom lessons: 24 JL/ECO; 36 MHS; 24 PCC; 12 PSU: 96 Total. Total field trips: 12 JL/ECO; 12 MHS; 12PCC; 12 PSU: 48 Total. Total restoration events: 12 student-focused events. Special events across ages: 4 special topics workshops for all. Student presentations and data-sharing events: 2.
<b>Program reach</b>	This project will include students from 3 <sup>rd</sup> grade to college graduates. Elementary and high school students will be drawn locally from a diverse, impoverished, and underserved community (see page 6). Total unique youth participants over two years: 430
<b>Data collection tools and method</b>	Pre and post- involvement questionnaires to all participating students. Bi-annual survey completed by participating faculty. Bi-annual qualitative site evaluation by Ecological Steering Committee members. A wide variety of student-collected ecological and environmental assays. A record of student volunteer hours. Focus group interview and discussion.
<b>Outcomes</b>	Programs continue independent of Metro funding. Increased collaboration and mentoring between partnering institutions. Increased conservation and ecology knowledge among youth participants. Increased identification with stewardship values among youth participants.



## PORTLAND PUBLIC SCHOOLS

2735 Northeast 82nd Avenue / Portland, Oregon 97220-5397

Phone: (503) 916-5220 • FAX: (503) 916-2702

### MADISON HIGH SCHOOL

March 12th, 2014

Conservation Education Grant Review Team  
Metro Nature in the Neighborhoods Program  
500 NE Grand  
Portland OR 97232-2736

Dear Heather Nelson Kent,

I am happy to offer my enthusiastic support for the involvement of Madison High students in the Siskiyou Field Lab proposal to Metro's Conservation Education grant program. I see this project as beneficial to our students, to the local neighborhood, to the network of institutional partners, and over time, to the ecology of the region as youth touched by this program impact the environment in beneficial ways.

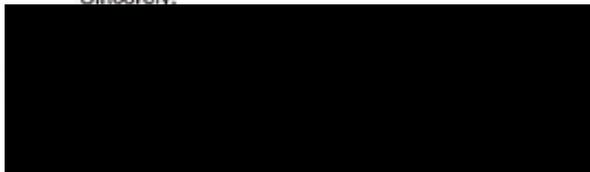
It was a great relief when Dharma Rain purchased the site across NE 82<sup>nd</sup> Avenue from Madison, and our institutions have already begun collaborating in a number of ways. Madison has an Advanced Placement Environmental Studies program (APES) as well as an ECO club, both of which are involved with the Siskiyou Field Lab. These groups have had classroom and site visits, and have used the site as an opportunity for volunteer activity, which is a required part of our student's learning. We have been delighted with the character of our interactions and involvement with Dharma Rain staff and volunteers.

Madison faculty will fold the Field Lab into lessons for a variety of subjects and grade levels. Our faculty are very excited about giving youth an opportunity to watch the site change as restoration efforts progress and the broader community establishes a new relationship with the site. We expect this will cultivate a sense of empowerment, possibility and optimism in a neighborhood that could really use it. We also see the Field Lab as a great opportunity to take ecological and conservation concepts and make them practical; rooting them in lived experience.

Madison High will be providing in-kind support in two ways: 1) Faculty time for designing, preparing for, teaching, and follow-up of lessons and labs that involve the Siskiyou Square site. 2) Use of Madison facilities, primarily lab equipment and supplies associated with processing samples or data collected on-site. Madison receives volunteer time from chaperones and visitors, access to several hands-on workshops, convenient access to a natural area, field equipment to support studies, and a visible opportunity for students to make a real difference in their world, on a timescale that they can appreciate.

This project is a great example of the kind of community-oriented, place-based, public-private partnership that Metro excels at supporting. Due to our student's diverse demographic, the proposal should score highly on criteria that value equity and need. Finally, let me assure you that the faculty involved are passionate about ecology and conservation; experienced and skilled teachers able to convey the material and its importance; and resourceful, creative and flexible in working with collaborators from other institutions. I hope your team recognizes the value of this project and is able to help support it financially. Please feel free to contact me, or one of our two guiding faculty if you have any questions or concerns about this proposal. Sue House can be reached at [sthouse@pps.net](mailto:sthouse@pps.net) and Jill Semlick can be reached at [jsemlick@pps.net](mailto:jsemlick@pps.net).

Sincerely,





January 5, 2014

Heather Nelson Kent  
Metro Nature in the Neighborhood Grants Program  
600 NE Grand  
Portland OR 97232-2736

*RE: Letter of Support for Dharma Rain Zen Center Application*

Dear Ms. Nelson Kent:

It is with great enthusiasm that we send you this letter of support for the Metro grant proposal *Siskiyou Field Laboratory* being submitted by the Dharma Rain Zen Center. As a collaborator in this proposal and a neighbor of the center we see a number of benefits for both our students and the college from this project.

- First, two of the cornerstones of PCC's educational mission are to cultivate an understanding of and a commitment to sustainability and community service amongst all our students. Involvement in the field laboratory would provide a valuable mechanism for incorporating these themes into our courses.
- Second, the kind of activities proposed for the center would be an excellent opportunity for students in introductory environmental science courses to engage in scientific fieldwork in their local community, thus enabling them to see the connections between science, their own lives, and the neighborhoods they live in.
- Third, the Southeast Campus is the site for the Portland Community College (PCC) district STEM center. This project would be an important step in realizing one of the center's goals of actively connecting with K-12, four-year undergraduate / graduate institutions, and local community organizations.

As one of the five collaborators on this project, the PCC Southeast Campus commits to \$1,500 of in-kind contribution which includes staff time for developing field activities and for materials for student work at the *Siskiyou Field Laboratory* for several of the earth and environmental science courses now taught at our campus.

We are excited about this project because of the unique contributions each of the collaborators can make to the success of the project and the welfare of our local community. Furthermore we see our involvement in this project as valuable to realizing our goal of serving that community.

Cordially,

A large black rectangular redaction box covering the signature of the sender.



## Ecology in Classrooms & Outdoors

4245 SE Milwaukie Ave Portland, OR 97202

PO Box 90293 Portland, OR 97290

[www.ecologyoutdoors.org](http://www.ecologyoutdoors.org)

March 7, 2014

Dear Metro Review Committee,

Ecology in Classrooms & Outdoors (ECO) is pleased to partner with the Dharma Rain Zen Center, and we enthusiastically support their efforts to invite students and community members to experience nature in the Siskiyou Field Lab. We are excited to bring students from Jason Lee School to explore and investigate nature in their neighborhood.

ECO is a Portland-based nonprofit organization that aims to “Connect students to nature through exploration of their local ecology.” We meet this mission by presenting hands-on Ecology Enrichment Programs in elementary schools. Ecology Enrichment Programs are facilitated by pairs of Ecology Educators who present a series of standard-aligned lessons in individual elementary classrooms throughout a school year. Programs are designed to occur over multiple years, ensuring students participate in multiple experiential learning opportunities in and about nature during their elementary school years. Since inception in 2005, ECO has worked with over 10,000 students in more than 350 classrooms in the greater Portland Metro region.

This program will be our first at Jason Lee School, and we look forward to working closely with teachers, students and partners. During the 2014-16 school years, ECO will deliver 4 hands-on lessons in six classrooms and facilitate two walking field trips for each class to the Siskiyou Field Laboratory. While at the Siskiyou Field Laboratory, students will apply concepts learned in class visits to real world experience through activities such as plant identification, searching for signs of wildlife, and microhabitat comparisons. Additional class lessons and field experiences for Lee are pending support from East Multnomah Soil and Water Conservation District.

ECO is also looking forward to the opportunity to work with the Dharma Rain Zen Center as a new partner. Both of our organizations recognize the importance of providing children and communities access to nature. Opportunities exist to strengthen this partnership in the future, as ECO would love to continue facilitating field trips at the Siskiyou Field Site for Lee students, and other nearby schools as well.

Thank you for considering this proposal! Please feel free to contact us with any concerns or questions.

Sincerely,



PO Box 90293 Portland OR 97290 \* [www.ecologyoutdoors.org](http://www.ecologyoutdoors.org) \* 503-367-8920

**Department of Geology**

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March 10, 2014

Heather Nelson Kent  
Metro Nature in the Neighborhood Grants Program  
600 NE Grand  
Portland OR 97232-2736

*RE: Letter of Support for Dharma Rain Zen Center Application*

Dear Ms. Nelson Kent:

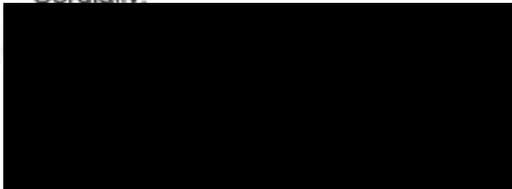
It is with great enthusiasm that we send you this letter of support for the Metro grant proposal *Siskiyou Field Laboratory* being submitted by the Dharma Rain Zen Center. As one of the six collaborators on this proposal we see a number of benefits for both our students and the university from our involvement.

- First, two of the cornerstones of PSU's educational mission are to cultivate an understanding of and a commitment to sustainability and community service amongst all our students. Involvement in the field laboratory would provide a valuable mechanism for more fully incorporating these themes into our courses.
- Second, the kind of activities taking place at the field station would provide students in introductory geology and environmental science courses an opportunity to engage in scientific fieldwork in their local community, thus enabling them to see the connections between science, their own lives and neighborhoods.
- Third, the unique character of the site would provide students in upper division geology and environmental science courses with an opportunity to learn critical professional skills in a real world context. It also provides ample opportunities for student research.
- Finally, PSU is a major participant in the Portland Metro STEM center. Involvement in the Siskiyou Field Station project would be an important step in realizing one of the center's principal goals of connecting with K-12, four-year undergraduate / graduate institutions, and local community organizations.

As a collaborator on this project, the PSU geology department commits to \$1,500 of in-kind contribution which includes staff time for developing field activities and for materials for student work at the *Siskiyou Field Laboratory* for several of the earth and environmental science courses now taught at our campus.

We are excited about this project because of the unique contributions each of the collaborators can make to the success of the project and the welfare of the community surrounding the field station. Furthermore we see our involvement in this project as valuable to realizing our goal of serving that community.

Cordially





# PORTLAND PUBLIC SCHOOLS

## Jason Lee K-8

March 13, 2014

Conservation Education Grant Review Team  
Metro Nature in the Neighborhoods Program  
500 NE Grand  
Portland, Oregon 97232-2736

Dear Heather Nelson Kent,

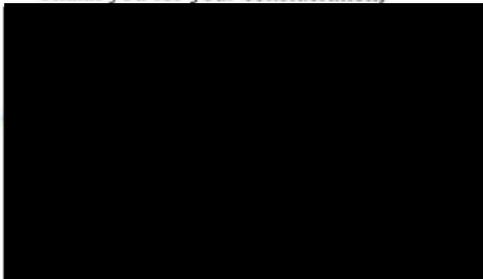
We are very excited about the possibility of incorporating the Siskiyou Field Laboratory and lessons from Ecology in Classrooms and Outdoors into Jason Lee's curriculum. I wholeheartedly support the involvement of Jason Lee students in the program, in partnership with Dharma Rain and ECO, and urge the Grant Review Team to fully fund this proposal.

Jason Lee is a Portland Public K-8 school with about 500 students. 78% of our student body qualify for free or reduced lunch, and 72% are students of color. One of Jason Lee's primary emphases is to engage with the local community for the benefit of the neighborhood and the educational enrichment of our students. As a SUN school, we are developing a broad base of support for our student body through synergistic collaborations with youth, parents, businesses, faith communities, libraries, and community organizations. The Siskiyou Field Laboratory fits perfectly within this framework and trajectory, and Jason Lee teachers and administration are fully committed to ensuring that this program is a success.

A particular irony for our students is that Jason Lee has numerous large natural green spaces around it (Siskiyou Square, Rocky Butte, Gateway Green), but to this point, they all remain largely inaccessible with the nearby exception of the fairly small Hancock Park. Implementation of the Siskiyou Field Laboratory would provide our classes with programming around and access to nature in a way that is currently lacking.

Jason Lee students would benefit from classroom lessons facilitated by ECO, in consultation with our staff. They would also get to have field trips that would incorporate practical examples from material presented in class, as well as a chance to engage in planting or other restoration activity. This kind of active learning where results are visible real-time is extremely fruitful, both for academic development as well as personal and social maturity.

Thank you for your consideration,



2222 N.E. 92<sup>nd</sup> Avenue Portland, OR 97220

ph.: 503.916.6144 fax: 503.916.2650



*Dharma Rain*  
**Zen Center**

2539 SE Madison Portland, Oregon 97214  
503-239-4846 Fax: 503-239-5217 E-mail: Staff@Dharma-Rain.Org

Feb 28<sup>th</sup>, 2014  
(Letter from property owner)

Metro Natural Areas Program  
Nature in Neighborhoods Conservation Education Grant  
600 NE Grand Ave.  
Portland, OR 97232

Dear Heather Nelson Kent,

We are very pleased to submit the following application to the Metro's Nature in the Neighborhood Conservation Education program. We feel that our goals are very congruent with what you accomplishing with this program, and look forward to an ongoing, collaborative and productive relationship between our organizations. Metro has already provided valuable feedback and encouragement over the last two years as we have acquired and begun the restoration of the 14-acre site that will support the Siskiyou Field Laboratory.

Northwest Zen Sangha Inc. does business as Dharma Rain Zen Center, and is both the owner of the land and the fiscal agent. It is a registered 501(c)-3 not for profit entity, and the Employer Identification Number is 93-6095067 (see attached IRS letter of determination). The land, development of it, and activities on it are insured and Dharma Rain staff members are maintaining it. Dharma Rain is also committing staff for project management, tools, food, facilities, and substantial volunteer time to the effort. Dharma Rain Zen Center's Board of Directors has unanimously given their approval to move forward with this project and this application process.

One thing I would like to highlight is that both Jason Lee Elementary and Madison High are cooperating with Dharma Rain on several levels: coordinating use of the site for science-related field trips, renting interim assembly space from the schools, sharing community garden resources, promoting events and programs, etc... We're very pleased with the enthusiastic welcome the local community has extended to us, and feel like programs such as the Siskiyou Field Laboratory is part of how we hope to return that gift. Part of the reason we're passionate about this is the clear evidence of need in an area strongly marked by urban blight, high poverty, low resources, and ethnic diversity: an essential component of this endeavor is involving local youth and cultivating a felt sense of agency and optimism.

The Siskiyou Field Laboratory has been in the works for quite some time, and Madison students are already regulars on the site. The 3.8 to 1 match is robust, and the breadth of community involvement and the prominence of the site provide excellent visibility for Metro's mission and activities. We are very excited to move from the planning stage and start making more substantive progress, and are very hopeful that Metro will be part of making this possible.

Thank you for your consideration,