1. Project Area Description and Plans for Revitalization

a. Target Area and Brownfields, i. Overview of Brownfield Challenges and Description of Target Area [5 pts]

The City of Hillsboro (the City) is applying for a U.S. Environmental Protection Agency (EPA) Brownfields Cleanup grant to remediate the Rock Creek Terrace (**the Site**) in Hillsboro, Oregon to address the environmental risk to humans and wildlife while improving the habitat adjacent to Rock Creek, a tributary to the Tualatin River. Rock Creek supports critical habitat for salmon rearing, including species such as Coho and Chinook salmon, which are both considered threatened under the Endangered Species Act. Rock Creek and its floodplain is part of the ancestral lands of the Kalapuya people, specifically the Tualatin band of the Kalapuya tribe, and is part of a broader conservation strategy in the Tualatin River Basin that plays an essential role in the habitat connectivity and health of the local ecosystem. Conservation actions focus on restoring riparian zones, managing invasive species, and improving water quality to support these salmon populations effectively. The City of Hillsboro is a diverse, growing city to the west of Portland.

The Target Area is inclusive of area within half-mile radius of the Site in South Hillsboro. This includes portions of census tracts 41067032302 (CT 323.02), 41067032503 (CT 325.03), 41067032412 (CT 324.12), 41067032410 (CT 324.10), and 41067032404 (CT 324.04) in Washington County, Oregon (U.S. Census Bureau 2020). Land uses in the Target Area include Multi-Dwelling Residential and Single Family Residential, General Industrial and Industrial Park (City of Hillsboro 2024). The City has observed rapid population growth over the past few years that has resulted in strain on balancing growth with sustainability. This has put emphasis on ensuring the public greenspaces are retained and restored to improve air quality, promote physical and mental well-being, foster social interactions, and create habitats for urban wildlife, all of which contribute to a healthier and more vibrant community. In the City's recent Comprehensive Plan, fourteen goals were identified for their community, including fostering healthy ecosystems, advancing environmental sustainability, and enhancing livability and recreation (Comprehensive Plan). These priorities are key factors to the City's desire for remediation and restoration of the Site.

Due to historical stormwater discharges from a nearby wood-treating facility and other treated timber sources including a railroad line and trestle, elevated concentrations of dioxins and heavy metals in soil have been identified in over 3 acres of Terrace floodplain habitat, as described in the Oregon Department of Environmental Quality (DEQ) ESCI database site listing 0148. Elevated concentrations are generally limited to the top few feet of soil. Dioxins and heavy metals are persistent known carcinogens that can also bioaccumulate in ecosystems. The Site is adjacent to residential communities and provides habitat for a diversity of birds, plants, and mammals, along with threatened salmonids in Rock Creek. The City is applying for this grant as it would help achieve multiple objectives reflected in City goals, including the remediation and restoration of a brownfield Site to remove threats to wildlife ecosystems, restore habitat conditions that promote local climate capacity and resilience, and promote accessible greenspace for the surrounding residential community.

ii. Description of the Proposed Brownfield Site [10 pts]

The Site occupies tax lot 1S209BC01100 at 3080 SE River Road in Hillsboro, Oregon. The approximately 15-acre Rock Creek Terrace (the Terrace) is an undeveloped and vegetated area with grass, trees, and brush (primarily blackberries) adjacent to Rock Creek. The Terrace consists of floodplain and wetland habitat that is severely overgrown with invasives and is largely inaccessible to the public. Rock Creek meanders along the western portion of the Terrace and eventually discharges to the Tualatin River to the south of the Terrace. Although there are no officially mapped wetlands on the Site, areas of the Terrace have low-lying seasonally ponded areas. The Hillsboro comprehensive plan designates the Property as floodplain land use (City 2017). The Property is further identified as a clean water services sensitive area; is part of the FEMA 100-year floodplain; and is designated a habitat benefit area.

The Site is contaminated by hazardous substances, including dioxins and heavy metals (arsenic, copper, chromium). The Permapost facility is located approximately 800 feet to the east. Permapost is subject to a RCRA Permit (Permapost Products Hazardous Waste Post-Closure Permit ORD 009 041 187, effective September 17, 2008 until September 17, 2018; application for renewal is on hold until a Record of Decision is issued by Oregon DEQ and Permapost is therefore currently under interim status (RCRA part 265 as opposed to 264). Feasibility analysis for cleanup is currently being conducted under DEQ oversight by Permapost.

A primary source of the dioxin and metals in shallow soil is historical stormwater releases from Permapost that discharged into the drainage cut across the Property. During certain periods of the year, this drainage cut likely overflowed onto the low-lying areas of the terrace and contributed to shallow soil contamination. The lateral and vertical extent of dioxin and metal contamination has been delineated during previous investigations as summarized in the 2019 Permapost Resource Conservation and Recovery Act Permit Focused Remedial Investigation Report, a 2021 Supplemental Investigation Report, and a 2023 revised Conceptual Site Model memorandum. These documents are available on DEQs ECSI database under Cleanup ID 0148. There are two primary areas at the Site:

- **Drainage cut area**. The drainage cut (approximately 0.5 acres) contained the highest concentrations of dioxins by an order of magnitude relative to all concentrations within the Property. Soil results exceeded the ecological screening criteria for dioxins, arsenic, chromium, and copper. Concentrations are more than 100 times greater than risk-based levels protective of ecological receptors, reflecting significant potential impacts to local receptors and broader populations that rely on floodplain habitat.
- **Terrace area**. South of the drainage cut, approximately 3 acres of the Rock Creek Terrace shows elevated shows elevated dioxin concentrations that exceed ecological risk-based levels for dioxins. The elevated concentrations in the low-lying areas of the terrace support stormwater overflow from the drainage cut and deposition as a primary transport mechanism. The extent of chemical impacts has been delineated.

Improving the floodplain habitat on the Site contaminated by dioxins and metals will offer significant environmental and public health benefits.

b. Revitalization of the Target Area, i. Reuse Strategy and Alignment with Revitalization Plans [10 pts]

The reuse strategy for the Site focuses on remediating contamination, restoring floodplain habitat, and ensuring safe public access, aligning with the City's goals to support a sustainable, healthy ecosystem and improve access opportunities for future generations. This approach reflects the City's commitment to environmental sustainability and livability, while supporting regional watershed efforts focused on salmon recovery and climate resilience. It will also promote future trail systems to support equitable access to natural spaces, providing underserved communities with meaningful opportunities for outdoor engagement.

The City has multiple comprehensive plans and active restoration initiatives, especially along Rock Creek, which contribute to broader regional goals for the Tualatin River Watershed. Through partnerships with Clean Water Services, Tualatin Soil and Water Conservation District, and Friends of Trees, the City promotes ecosystem health by restoring habitats and organizing tree-planting events.

The Hillsboro 2035 Community Plan emphasizes the importance of safeguarding natural resources, such as air, land, water, and habitat. Hillsboro's involvement in landscape restoration through the "Tree for All" initiative focuses on improving fish habitats, removing invasive species, and re-establishing native vegetation along Rock Creek. The City's Comprehensive Plan also includes goals to minimize soil contamination, improve wetland and floodplain functions, and create a network of connected wildlife corridors, aligning with environmental and community objectives like enhancing water quality, supporting salmon, and expanding recreational access via future trails.

By remediating contamination within the floodplain, this reuse strategy reduces potential health risks and supports biodiversity. The Site is considered a "sensitive environment", as defined in OAR 340-122-115(50), which designates "areas that of particular environmental value where a hazardous substance could pose a greater threat than in other, non-sensitive areas". The restoration of floodplain habitat strengthens ecosystem health, improves water quality, and provides flood control and carbon sequestration benefits. The National Oceanic and Atmospheric Administration (NOAA) implements strategies for salmon recovery that prioritize creating and restoring critical salmon habitats to ensure water quality and quantity, restore natural processes in estuaries and floodplains, and protect biodiversity. NOAA's recovery strategies further align with this project as they emphasize collaboration with local partners to support ongoing watershed-level conservation efforts.

Restoring these areas reinforces their natural roles and contributes to a healthier, more resilient environment for the community.

Remediating the Rock Creek Terrace is an essential step towards establishing a broader, interconnected trail system that will benefit nearby neighborhoods in the target area, many of which face educational and language barriers, including low high school graduation rates and limited English proficiency. This project aims to improve local access to natural and recreational spaces, creating equitable opportunities for outdoor engagement in these underserved communities.

The City has obtained letters of support for the project and these are provided as Attachment XYZ.

ii. Outcomes and Benefits of Reuse Strategy [10 pts]

The City's reuse strategy is to remediate contamination, restore floodplain habitat, and promote safe public access, as described in Section 1.b.i, above. The reuse strategy aligns with and advances the City's Community and Comprehensive Plans, multiple local initiatives, and broader NOAA recovery strategies as mentioned in Section 1.b.i. The benefits of the Applicant's plans are to reduce human health and ecological risks, improve natural system functions such as 100-year floodplain resilience, and advance environmental justice. Key project elements highlighting the reuse strategy outcomes and benefits include:

- **Ecosystem and Human Health:** The project will restore vital riparian habitat along Rock Creek, improving fish and aquatic health by enhancing rearing and spawning areas for native species including threatened salmonids, supporting long-term biodiversity and water quality. The removal will also achieve protectiveness for terrestrial ecological receptors, such as songbirds and riparian mammals. Addressing soil contamination and improving water quality will also reduce human exposure to toxins, which can disproportionately affect marginalized communities in the area
- **Climate Resilience:** The area includes a 100-year floodplain and temporary ponded areas that will be restored through contaminant treatment and removal. The project will enhance climate change-related flood management and provide better habitat for local wildlife. Restoring the area for native species will also increase the capacity for carbon sequestration and increase resilience to changing climate patterns by increasing species diversity.
- **Equitable Access:** Remediation and restoration will increase opportunities for public access. Future planned trails and amenities can tie into the area, offering benefits to the community. 50 percent of the population within the Site vicinity are people of color, and the neighborhood directly adjacent to the creek is designated an EPA Disadvantaged Community. Restoration projects such as this one also help ensure that underserved populations, particularly low-income communities or communities of color, have access to healthier ecosystems and safe recreational spaces.

c. Strategy for Leveraging Resources [20 pts]

i. Resources Needed for Site Characterization

The site characterization is sufficient for remediation to continue.

ii. Resources Needed for Site Remediation

No additional resources are anticipated for Site Remediation.

iii. Resources Needed for Site Reuse

Table 1. Potential Additional Resources for Renovation and Reuse

Name of Resource	Purpose	Resource Secured or Unsecured?	Additional Details or Information
Name	1.c.iii – Reuse	Secured	$000 for use from type of source [grant name if there is one].
Name	1.c.iii – Reuse	Unsecured	Loan financing of up to $00 million with favorable interest rates could support improvements X, Y, Z.

iv. Use of Existing Infrastructure

Existing infrastructure (including developed roads in the D&G industrial park) will be used for access to support the planned work for the proposed cleanup. No new or permanent infrastructure is needed for the reuse of the site.

2. Community Need and Community Engagement

a. Community Need, i. The Community's Need for Funding [5 pts]

EPA's Environmental Justice Screening and Mapping Tool (EJScreen) data show that people living in the Target Area show relatively greater low income households, unemployment, and people of color. Table 2 also shows that the percentage people living in the Target Area without a high school diploma is 3 times higher compared to the County, and is in the 92nd percentile for the state. Similarly, the amount (33 percent) of non-english speaking households is higher in the Target Area than in the surrounding areas.

Table 2. Community Data

Indicator	Target Area	Hillsboro	Washington County	USA
Population	2,902	107,145	599,541	331,449,281
Low Income	24%	21%	19%	30%
People of Color	50%	45%	37%	40%
Unemployment Rate	6%	5%	5%	6%
% of Renters	30%	49%	39%	na
Total Non-English	33%	29%	25%	na
Without High School Diploma	21%	9%	7%	11%

Source: Environmental Justice Screening and Mapping Tool.

These socioeconomic factors demonstrate that the community in the Target Area is overburdened. The proposed project to remove contamination from, and promote future access to, the project area is a needed step to help local residents. **With proportionally higher rates of poverty and lower educational attainment, the people of this Target Area need federal assistance to implement this project and restore full use of the Site to support public benefit.**

ii. Threats to Sensitive Populations, (1) Health or Welfare of Sensitive Populations [5 pts] and (2) Greater Than Normal Incidence of Disease and Adverse Health Conditions [5 pts]

Sensitive population health risk factors in the Target area and for the State are summarized in Table 3.

Table 3. Sensitive Population Health Risk Factors in the Target Area

	Target Area	State
Asthma	10.4%	11.1%
Cancer	5.9%	7%
Heart disease	4.5%	5.9%
Low Life Expectancy	18%	19%
Disabilities	11.9%	15.4%

Source: Environmental Justice Screening and Mapping Tool.

(3) Environmental Justice, a. Identification of Environmental Justice Issues [5 pts]

EPA's Environmental Justice Screening and Mapping Tool (EJScreen) data show that Target Area residents have a 91% greater risk of exposure to particulate matter (PM 2.5) compared to their counterparts across the U.S. (Table 4). These exposures can have serious health impacts on those who experience them. According to the CDC, exposure to PM 2.5 can be associated with respiratory and cardiovascular problems, including asthma, bronchitis, and heart attacks, and can even lead to strokes or premature death (EPA 2024a).

EJScreen values show the population of the Target Area is diverse, with values near or above the 90th percentile for the state in three EJ indexes: residents who are people of color (90th percentile), limited English-speaking households, (95th percentile), and less than high school education (92th percentile).

The Target Area also contains an EPA Inflation Reduction Act (IRA) disadvantaged community (Blockgroup: 410670325032), located immediately west of Rock Creek. This indicates the community is is disadvantaged for the purposes of funding decisions from IRA programs to implement environmental and climate justice programs.

Table 4. Identifying Sensitive Populations in the Target Area — EJ Screen Environmental Burden and Socioeconomic Indicators Data	Percentile in	
	State	U.S.
Particulate Matter 2.5	22	91
Diesel Particulate Matter	55	71
Toxic Releases to Air	52	54
RMP Facility Proximity	56	65
Hazardous Waste Proximity	76	76
Wastewater Discharge	68	43
People of Color	90	65
Limited English-Speaking Households	95	87
Less Than High School Education	92	83

Notes
RMP Facility = a facility that has submitted a risk management plan to the U.S. Environmental Protection Agency.
Shading indicates that the Target Area ranks in the 75th percentile or above for index values and above the U.S. percentage for indicators.
Source: Environmental Justice Screening and Mapping Tool.

Collectively these data demonstrate that the community in the **Target Area is disadvantaged in the state and country.** The proposed project will reduce the health risks to people, including vulnerable populations, in the Target Area and promote opportunities for community members to enjoy green space, which will **positively impact the overall health and well-being of people living in this EPA identified disadvantaged area.**

b. Advancing Environmental Justice [5 pts]

The goal of the proposed project is to remediate contamination, restore floodplain habitat, and promote safe public access. Remediating the Rock Creek Terrace is an essential step towards promoting public access that will benefit nearby neighborhoods in the Target Area, many of which face barriers as reflected in Section 3 above. This project aims to reduce environmental hazards and improve local access to natural and recreational spaces, creating equitable opportunities for outdoor engagement in these underserved communities and advance environmental justice.

b. Community Engagement, i.–ii. Project Involvement [5 pts] and Project Roles [5 pts] (2.b.i through ii)

Table 6. Project Involvement and Project Roles		
Organization/Entity/ Group Name	**Point of Contact**	**Specific Project Role or Assistance Provided**
City of Hillsboro	Ken Christian Ken.Christian@hillsboro-oregon.gov	Provide liaisons with the community, advertise community meetings, share project updates around site reuse on its website and in its newsletter. Advise the City on community engagement and messaging.
		Advertise community meetings via website, newsletters, and social media. Facilitate meetings with the public and share project updates with members and the public.
		Advise City and project partners on regulatory and environmental impacts, share communications with the community about contamination in the Park.

iii. Incorporating Community Input [5 pts]

The City has and will continue to seek community input at future scheduled public meetings. The City has prepared an analysis of brownfield cleanup alternatives (ABCA) that weighs the alternatives for cleanup and received feedback from the public on the draft EPA application and draft ABCA at a meeting on XYZ.

Discussion at the meeting included XYZ. The presenters responded to questions about the XYZ. The Applicant's website for the project links to a video of the presentation and project materials. The Applicant also provided materials translated into Spanish.

The project budget includes funding for culturally appropriate forms of community engagement as the project is developed. The Applicant will develop a public involvement plan upon award notification, including methods to stimulate meeting participation. The City will transparently and publicly report in writing (posted online) and share the feedback it incorporated and how, and the feedback it did or could not and why in subsequent public meetings.

3. Task Descriptions, Cost Estimates, and Measuring Progress

a. Proposed Cleanup Plan [10 pts]

The preferred remedial action includes the following:

- Clearing and grubbing of approximately 3.5 acres of habitat to remove vegetation including invasives.
- Excavation of 3,917 bulk cubic yards of contaminated soil in excavation area (approximately 0.5 acres).
- Off-site disposal of 5,875 tons of excavated soil.
- Import and placement of clean fill material to return excavated areas to the existing grade.
- Amend soil exceeding remediation criteria in other portions of the Terrace with activated carbon (approximately 88 tons of carbon amendment over 11,686 square yards) and conduct effectiveness monitoring.
- Replanting and reseeding over 3 acres of area to restore habitat conditions.

This cleanup plan is protective, long-term reliable solution that will effectively remediate soil conditions and improve habitat, as further described in the ABCA.

b. Description of Task, Activities, and Outputs

i–iv. Project Implementation [10 pts], Anticipated Project Schedule [5 pts], Task/Activity Lead [5 pts], Outputs [5 pts] (3.b.i - 3.b.iv)

Table 7. Tasks and Activities	
Task 1 – Project Management	
i.	**Implementation:** The City Project Manager (PM) and the qualified environmental professional (QEP) will be responsible for overall project management and execution, with oversight and input from EPA and DEQ. The City PM will manage project tasks, monitor schedule and budget, report on project activities to stakeholders, and procure and oversee the QEP, which will support reporting and developing a final closeout report documenting all project activities. Two City staff will attend two regional brownfield conferences.
ii.	**Anticipated Project Schedule:** QEP procurement will take place after the notice of grant award; grant funding is expected to become available by 2025. Procurement of the QEP is expected between July—December 2025; additional project management work will take place July 1, 2025—September 30, 2029.
iii.	**Task/Activity Lead:** City PM and QEP project managers.
iv.	**Outputs:** 15 quarterly reports, 4 federal financial reports (FFRs), 1 final summary report.
Task 2 – Community Engagement and Outreach	
i.	**Implementation:** The City will collaborate closely with area residents, project partners, and other stakeholders throughout the cleanup planning and remedial action; develop a public involvement plan and conduct four community outreach meetings at key project milestones; maintain and update the project websites and online information repository; and communicate project information through newspaper, newsletter, social media, email, and website notifications. The QEP will support the City with facilitating community meetings, drafting articles and press releases, and assisting with outreach to neighbors in the community, including finding interpretation and translation for meetings and administering stipends through partnership with the community based organizations.
ii.	**Anticipated Project Schedule:** July 1, 2025 to September 30, 2029 with key public meetings in 2026/7 (during cleanup), July 2029 (post cleanup), and other milestone meetings.
iii.	**Task/Activity Lead:** City PM and QEP project managers; assist: project partners.
iv.	**Outputs:** 1 public involvement plan (PIP), four community meetings and notes/attendance/recordings, website and online information archive, 6 press releases or newspaper/web articles. Other outreach as needed.

Table 7. Tasks and Activities

Task 3 – Remedial Design and Cleanup Planning
i. **Implementation:** Activities will include finalizing the ABCA including review and approval by Oregon DEQ; holding the ABCA 30-day public review and comment period; preparing a work plan for additional incremental sampling methodology/composite sampling to address data gaps for remedial design; performing a cultural resources review and assessment for the project area; preparing a wetlands delineation, obtaining permits, and undergoing wetlands compensatory mitigation (if present); negotiating and receiving regulatory approvals; completing 50%, 90%, and 100% design documents; preparing bid documents for cleanup contractors; and bidding process support, including contractor selection.
ii. **Anticipated Project Schedule:** July 1, 2026—July 1, 2027.
iii. **Task/Activity Lead:** City; assist: QEP, EPA, and DEQ project managers.
iv. **Outputs:** 1 ABCA; 1 data gaps investigation work plan; 1 health and safety plan, 1 quality assurance project plan; 50%, 90%, and 100% design documents; 1 set bid documents.
Task 4 – Remedial Action Implementation
i. **Implementation:** The Applicant will use the majority of the grant funding for site cleanup implementation. With support from the QEP, the City will procure a remediation contractor in compliance with state regulations and 2 Code of Federal Regulations 200.317.326, which the Applicant project manager will oversee with QEP assistance. Contractor cleanup activities are estimated to include excavation and off-site disposal of approximately 5,875 tons of contaminated soil; with backfilling, grass seeding, and vegetation planting to restore park conditions as application of 88 tons of carbon amendment over 11,686 square yards. The Applicant will work with DEQ to ensure the cleanup meets state regulations.
ii. **Anticipated Project Schedule:** July 1, 2027—September 1, 2028.
iii. **Task/Activity Lead:** City PM; assist: construction contractor, QEP, and DEQ and EPA project managers.
iv. **Outputs:** 1 final cleanup summary report.
Task 5 – Monitoring and Improvements
i. **Implementation:** The City PM will perform yearly carbon amendment and habitat conditions monitoring post completion to ensure park restoration is achieved for future intended use.
ii. **Anticipated Project Schedule:** September 1, 2028 to September 30, 2029.
iii. **Task/Activity Lead:** City PM; assist: QEP.
iv. **Outputs:** Yearly monitoring report.

c. Cost Estimates [15 pts]

The City will lead Tasks 1 and 2, directing consultants to assist as needed. The QEP will lead Tasks 3 through 5, with support from the City as needed. Personnel costs in this section are based on City personnel costs of $150/hour.

Table 8. Project Budget	Project Tasks					
Direct Costs	**1. Project Management**	**2. Community Engagement and Outreach**	**3. Remedial Design and Cleanup Planning**	**4. Remedial Action Implementation**	**5. Monitoring and Improvements**	**Total**
Personnel	$29,550	$15,000	$9,600	$0	$0	**$54,150**
Fringe Benefits	$0	$0	$0	$0	$0	**$0**
Travel	$1,800	$0	$0	$0	$0	**$1,800**
Equipment	$0	$0	$0	$0	$0	**$0**
Supplies	$0	$0	$0	$0	$0	**$0**
Contractual	$38,000	$28,600	$166,400	$1,667,180	$43,820	**$1,944,000**
Other	$0	$0	$0	$0	$0	**$0**

Table 8. Project Budget	Project Tasks					
Direct Costs	**1. Project Management**	**2. Community Engagement and Outreach**	**3. Remedial Design and Cleanup Planning**	**4. Remedial Action Implementation**	**5. Monitoring and Improvements**	**Total**
Total Direct Costs	**$69,350**	**$43,600**	**$176,000**	**$1,667,180**	**$43,820**	**$1,999,950**
Total Indirect Costs	$0	$0	$0	$0	$0	$0
Total Budget	**$69,350**	**$43,600**	**$176,000**	**$1,667,180**	**$43,820**	**$1,999,950**

Table 9. Development of Cost Estimates	
Task	**Cost Basis and Assumptions**
1. Project Management	Personnel: **$29,550** • 24 project team meetings (6 meetings/year) (24 x $150/hour [hr]) x 2 City personnel) = $7,200 • 15 Quarterly Reports (15 reports x $150/hr x 1 hrs/report = $2,250) • 4 FFR reports (4 reports x $150/hr x 1 hr/report = $600) • 1 Final Summary Report (1 report x $150/hr x 2 hours = $300) • 2 Regional Brownfield Conferences (32 hours x $150/hr[staff 1]) + (32 hours x $150/hr[staff 2]) =$19,200 Contractual Costs: **$38,000** • 24 project team meetings (6 meetings/year) (24 x $200/hr x 2 QEP personnel = $9,600) • 15 quarterly reports (15 reports x $200/hr x 6 hrs = $18,000) • 4 FFR reports (4 reports x $200/hr x 4 hrs = $3,200) • 1 final summary report (1 report x $200/hr x 12 hrs = $2,400) Travel Costs: **$1,800** • Two staff to attend two regional brownfield conferences ($450/person x 2 staff x 2 conferences = $1,800; includes hotel, meals, rental car/mileage and incidental costs)
2. Community Engagement and Outreach	Personnel: **$15,000** • Community outreach meetings (4 meetings x 8 hrs x $150/hr= $4,800) • Public involvement plan (8 hrs x $150/hr = $1,200) • Preparation of press releases or newspaper/web articles (40 hrs x $150/hr = $6,000) • Direct outreach and engagement with impacted, underserved communities (20 hrs x $150/hr = $3,000) Contractual Costs: **$28,600** • Public involvement plan (20 hrs x $200/hr = $4,000) • Community outreach meetings (4 x 10 hrs x $200/hr = $8,000) • Articles/media updates (6 articles x 4 hrs x $200/hr = $4,800) • Direct outreach and engagement with impacted, underserved communities (40 hrs x $200/hr = $8,000) • Interpretation and translation (19 hrs x $200/hr = $3,800)
3. Remedial Design and Cleanup Planning	Personnel: **$9,600** • Support development of Bid Documents (RFP) for cleanup activities, evaluation of bids, calling references, coordination of pre-bid onsite meeting and selection of contractors (40 hours at $150/hr =$6,000) • ABCA and engineering design work plan review (24 hrs x $150/hr = $3,600)

Table 9. Development of Cost Estimates

Task	Cost Basis and Assumptions
	Contractual Costs: **$166,400** • Finalize ABCA, including incorporating comments from public notice, further sampling and regulatory review • Quality Assurance Project Plan (QAPP) • Health & Safety Plan (HASP) • Cultural resources review and assessment • Engineering Design Documents • Permitting • Bid Document preparation See attached ABCA for remedial design and permitting costs
4. Remedial Action Implementation	Contractual Costs: **$1,667,180** Contractor cleanup activities are estimated to include excavation and off-site disposal of approximately 5,875 tons of dioxin/furan and metal-impacted soil; with backfilling, grass seeding, and vegetation planting to restore park conditions as application of 88 tons of carbon amendment over 11,686 square yards. See attached ABCA for cleanup cost estimates (1 cleanup x $1,624,260)
5. Monitoring and Improvements	Contractual Costs: **$43,820** • Yearly carbon amendment/habitat monitoring and reports

Notes
ABCA = analysis of brownfield cleanup alternatives.
cy = cubic yard.
FFR = federal financial report.
HASP = health and safety plan.
hr = hour.
QAPP = quality assurance project plan.
QEP = qualified environmental professional.
sy = square yard.

d. Plan to Measure and Evaluate Environmental Progress and Results [5 pts]

The City and QEP will prepare a project work plan with a detailed schedule of milestones such as completion of the sampling and analysis plan and quality assurance project plan, public meetings, and remedial action implementation. The City will track and evaluate monthly progress in coordination with the QEP and construction contractor and publish results in quarterly progress reports, which the City will review and make publicly available on the project website. Measurement will compare output and outcome goals to quarterly achievements so that deviations can be identified and corrected in a timely manner. Measurable cleanup results that the City and QEP will record include reduction of contaminant concentrations below risk-based thresholds for human and ecological health through performance and confirmation sampling during remedy construction. Upon successful completion of cleanup, additional investments to promote public access can be planned. While these investments are outside of this grant request, these improvements cannot take place until cleanup occurs.

4. Programmatic Capability and Past Performance

a. Programmatic Capability [15 pts], i. Organizational Structure [5 pts], ii. Description of Key Staff [5 pts]

To be completed.

iii. Acquiring Additional Resources [5 pts]

To be completed.

b. Past Performance and Accomplishments

i/ii. Currently Has or Previously Received an EPA Brownfields Grant (1) Accomplishments [5 pts], (2) Compliance with Grant Requirements [10 pts]

To be completed.