PSP ILF IRT Meeting

March 30, 2011

Corps, Edsel Room

10:00am-3:30pm

Attendees: Kim Harper, Patricia Johnson (Facilitation), Yolanda Holder (Notes), Hans Hunger, Brad Murphy, Gail Terzi, Annette Pearson, Allison Warner, Ann Boeholt, Karla Kluge, Allison O'Sullivan (Phone), Linda Storm (Phone).

Announcement

Kim Harper is taking another position within Ecology. Gail Terzi will be the interim IRT Corps rep. for the PSP ILF project.

All decisions made within these meetings are regarding the Pierce County (PC) ILF Program only. We will use the Pierce County Instrument as a template instrument for future PSP ILF Program areas.

Credit/Debit Tool

Linda has concerns regarding using the credit/debit tool (C/D or tool) as a program-wide system. Suquamish Tribe shares the same concerns as EPA. Gail specified that the C/D tool is being used for the King Co ILF project and EPA made no comments or objections to its use. It was suggested that those with outstanding questions regarding the C/D tool should sign-up for the training provided by Tom Hruby.

Annette stated that Alex Callender (Ecology) will be providing a C/D training for Pierce County. This training will not be as in-depth as Tom's training because it will be covering numerous topics.

ACTION: All - Send an e-mail to Annette w/Pierce Co if you would like to attend the C/D training by Alex.

One feature of the C/D tool that was explained at Tom's training is that the debits will be kept in separate buckets. At our previous meeting, we discussed lumping the credits from the functional buckets into a universal credit. After hearing that the debits will be in buckets, it makes sense to also keep the credits in the same buckets.

There's a lot of flexibility with the C/D tool for different projects and it's hard to give buy-off on something with such flexibility. The C/D tool is based on the rating system which also had differentiation w/ratios.

How you track the buckets, what the ledgers look like, etc. will be spelled out within the project instrument.

The decision we are looking for in today's meeting: are there objections to using the C/D tool for the PC project? The tool is in a testing mode for one year. The PC project would be one of the pilot projects using/testing the tool. The C/D tool is much more transparent than the ratios currently being used. We could incorporate w/in the instrument text to reevaluate the tool and see if it's working or if it needs to be tweaked.
Karla – I think we should move forward with using the tool and testing it rather than staying stagnant. It would be a good idea to track ratios and the tool, so we have a good comparison at the end of the year to see if it is working.

There will be a big difference with enhancement projects between ratios and the tool. The tool doesn't give as much credit for enhancement projects because this type of activity does not provide as much functional lift.

Linda – she wants clarification in the instrument that the tool is for fresh water wetlands only.
Patricia - this information was already provided in the 'scope of work' discussion back at November's PSP ILF meeting.
Linda - EPA can't make a firm decision until they see it in writing w/in the draft and final instruments.
Patricia - PSP can't write an instrument w/o buy-off that acre-points is the currency to be used for this project.

Ann – the bioswales are not captured w/the tool. Can we have something in the instrument for this to be captured later on?
Patricia - The draft instrument can have general information, when it comes to the specific project there will be things that are not captured on the credit and debit side w/the tool. The tool would be used as the starting point and these specifics would be captured w/in the mitigation plan for the receiving sites.

Decision: The C/D tool's 'acre-points' will be the primary form of currency for the PSP Pierce County ILF Program.

Tracking Credits
Buckets vs universal credits.

After taking Tom's training yesterday, it would probably be easier to keep the credits in the separate buckets rather than lumping the numbers to get a universal credit. With separate buckets, there would still be potential for trade-offs. Would this be in the instrument? Yes. What about buckets going in the hole? You would try and take care of that deficit with the next site. The goal is to address the needs of the watershed as a whole.

In a certain basin, you may need to ensure that all buckets are covered – but not in all basins. Who does the work if there is a deficit in one bucket to ensure that deficit is taken care of with the next site? You, as the IRT make those decisions. The decision would be based on the watershed analysis for that area. The characterization has already been done in PC and we've got some of that information. We also have the site selection guidance, etc. The process will be provided w/in the instrument and the compensation planning framework.
Ann - Larchmont will receive credits in all functional buckets (water quality, hydrology, and habitat).

We'll be talking about site selection at the next meeting.

Right now, PSP has two sites and Linda helped select one of those sites. She thought the Larchmont site has great potential to contribute to the watershed. However, how the site fits into the ILF program and finalizing decisions she is not sure on.

Karla - it would be better to use the separate buckets and then if you wanted to track as a universal credit - behind the scenes - that's fine. She understands that some buckets will/can go in the red at some points and then be compensated for at the next site.

Decision: PSP will use separate functional buckets (water quality, hydrology, and habitat) for the Pierce County ILF Program. See appendix A.

Release of Credits
Looking for buy-off on the general types of performance standards (PSs) to attain a credit release and a general agreement of the proportion of credits to be released.

The document was provided w/in last month's meeting minutes.

Hans would like to see a larger amount of credits released earlier. Is there flexibility for an earlier release of credits, i.e., if a site is meeting 110% of their PSs. Patricia has viewed numerous compliance sites and is wary to have credits released earlier. Some sites she's seen have performed well early on, but problems appear on the site a few years later. This would be a potential problem with receiving an early release of credits.

In order for credits to be released, you must meet PSs. You meet PSs over time and you get more credits released. PSP will be requesting advance credits, in addition to the pre-capitalized credits. The pre-cap credits will be received for the South Midland mitigation which is already done.

Advance credits are similar to a credit card – once we have credits released, we can sell those credits and basically pay down our credit card balance. You would have a higher multiplier with advance credits – so, the debit project may need to purchase more credits. You should have one credit price regardless of whether they are advance credits or released credits. The risk factor comes in to play in the number of credits a site provides, and the temporal loss factor affects the number of debits.

A pre-capitalization site, such as South Midland, offers a break on the credits (release and amount) because the project is already built. Example: with an emergent system, it almost doubled the amount of credits received.

If advance credits are purchased, PSP has 3 yrs to get the project in the ground, and then another 10 years for the full release of the credits. Is the use of the program going to be hindered because they've sold all their credits and don't have another credit release for years down the road? The credit release schedule has never been a problem in banking. You should always have credits available to sell. The larger worry is getting enough money from the credit sales to build another project within 3 years. Having ¼ of the credits held back at Yr 10 is too much. It would be better to keep in line with wetland mitigation banks at 10-15% percent of the credits be held back till final release.

Decision: Credit release schedule changed from original proposal provided by Patricia:
Change from 1/8 of credits to be released at Year 7 to 1/4.
Change from ¼ of credits to be released at Year 10 to 1/8.
See Appendix A.

Can you get an earlier or additional release of credits for better performance on a site? It is very hard to determine whether performance standards are being met prior to the release schedule because the PSs are proven over time. If you achieve the PS in Yr 3 instead of Yr 5 and you have verified w/the C/D tool can you get an earlier release? Possibly. We need to have/show the longevity of site performance. Incentives of earlier or more credits are always good. There can be some flexibility provided w/in the credit release schedule depending on the PSs. This potential would be the exception. The usual way sites have received more credits than originally proposed is if more wetland is created. However, you typically will not receive more credits for wetlands created w/in a buffer, especially w/in the minimum required buffer. You get a better credit ratio for the overall site w/having a buffer. If your buffer is larger than the minimum required, you could potentially receive more credits for additional wetland created w/in those areas. If we can build in some incentives for better performance, we want to add that w/in the instrument.

If someone achieves their Yr 7 PS, you wouldn't give them the credit in yr 5? It would depend upon the site. If you're meeting Yr 7 PS in Yr 5, PSP would like to see this same level of performance again in Yr 6 to show the consistency prior to requesting an early credit release.

General credit releases and proposed milestones will be in the ILF Program Instrument. The specific sideboards for flexibility in credit release and early release can be provided within the project specific mitigation-receiving site plan. Aren't those sitting at this table also the ones regulating the debit projects? There should be more assurance of the performance.

At this point, banks are not receiving their credit releases on schedule due to issues on site. The issues on banks are more obvious than permittee-responsible sites because they are larger project sites.

Linda left the meeting.

Advance Credits
See Appendix B.
This is the beginning of this discussion and we will continue to discuss this topic over the next few meetings.

Advance credits are similar to a credit card with a "credit limit" pre-approved by the IRT. At a future meeting PSP will propose an advance credit request, which is essentially the "credit limit"on a credit card. If advance credits are used/sold, then the first actual credit release would help to 'pay-off' the advance credits, like paying off the balance on your credit card. The Larchmont site will be in the ground shortly.

Gail suggested that it's better to err on the side of asking for more advance credits to be provided than less. So, you don't have to amend the instrument because you didn't have enough advance credit sales to actually be able to build a new project site. Once a credit is sold, a project needs to begin construction within 3 years.

Why must there be a credit limit? The advance credit amount has to be approved by the IRT. Without a credit limit – every debit project is a wetland lost that is uncompensated until the mitigation site is built. We don't want a lot of impacts to happen prior to the compensation.

ILFs are typically used for small impacts. It is good to know how many impacts occur in an area to help determine the amount of advance credits to request. PC is hoping that we could amend the instrument to alter the number of credits. It would be a revolving account.

It seems that with the credit release schedule proposed that you would run out of advance credits prior to achieving the PSs to earn more credits.

How can you start the Section 7 consultation prior to a site being selected? Need to continue to work through this issue. It's easier to work through this issue when you have a roster of proposed sites. The Compensation Planning Framework (CPF) should contain the site prioritization list. You don't want to change the instrument numerous times because even if

you go through the streamlined process it would still need to go back through the IRT for determination and signatures.

Are there any other incentives that could be built in to this process? Yes. For example, if you build the next site earlier, you would have your credits released sooner. One advantage of already having the projects in the ground with the pre-cap sites is that we could charge less for those credits. Basically, the first credit purchasers would get the biggest benefit – because they would get a better ratio due to the project already being built. How can we build up the incentive for the sponsor – the sites that are already built would get more credits released (because there a lower risk factor).

It doesn't seem equitable that depending on the amount of time a site is in the ground determines the amount of credits a debit project would need to purchase. If we assume that we will always have projects in the ground, then the debit project would always get a concurrent rate. We have projects that are in the ground, so we should get credits released. If we continue to move forward with always having a project in the ground, prior to needing advance credits, there should be incentive with the ratios. The cost of the credits would need to be approved by the IRT. The cost of the credits would be the same regardless of being an advance credit or a released credit.

KC is potentially using a sliding price scale. Debit project proponents that purchase credits early would get a lower rate, but those that buy credits later may pay more for credits. Sometimes the credits you purchase will be concurrent and other times the credits will be delayed.

Kim and Gail - It makes sense to use a 'concurrent' ratio on the debit projects.
Brad - The longer you have your site in the ground, the better the risk factor on the credit end.

Advance mitigation would usually be meeting PSs.

Ann - Credit release schedule – no release until year 2. At that time, we'd get a risk factor of 1:1.

Incentive: The total amount of credits that can be released could increase if PC waits 2 years to request their first credit release.

- 1st release - acquisition: 1/8 at .9 risk factor
- Installation: 1/8 at .9 risk factor
- Year 1: 1/8 at .9 risk factor
- Year 2: 1/8 at 1:1 risk factor

Incentive: PC should always keep a site in the ground prior to an impact. PSP will recommend w/in the instrument that debit projects use a concurrent ratio. We know the final decision on the debit ratio will be up to the regulator, but concurrent should be our recommendation.

It is best to ensure the credit costs match up to the amount of building an actual project site. You don't want to have the credit amount so high that no one will buy the credits. Patricia will provide an example of the credit amounts, releases, etc. at the next meeting. The overall credit amount is calculated at the beginning, but if you don't attain PSs you would not receive those credits. PSP needs to be very careful on the credit pricing to ensure sales, but also to ensure they receive enough money for the next project.

South Midland was originally built as an advance mitigation site for the Clover Creek basin. South Midland will now be used as one of the ILF project sites.

All the legal sideboards are in the instrument, and the details of the specific project are contained w/in the appendices. In this manner, the items that potentially need to be changed could be altered quicker because they would only need an exchange of letters with the Co-Chairs' signatures in consultation w/the IRT; and not need the Corps' District Engineer and the Colonel to re-sign the document.

Patricia would like to conduct a site visit in May.
Allison - It is very difficult to make tribal decisions on the program-wide level. We are only discussing the PC pilot and their program. It's difficult to make some decisions w/o having information on the site. PC does have a website that contains links to their project sites.

ACTION: Patricia will post PCs wetland delineation and assessment report and the site project information onto PSPs website and send the link to Allison O. and Karla.

Three levels:

- PSP ILF program
- PC ILF pilot
- Design and development of the pilot site.

The City of Tacoma is very interested in the ILF program and other mitigation options which could be uses by proponents w/impacts to wetlands.

Costs of Credits
Patricia provided a handout (Appendix C). This is just to begin the discussion and we will continue this topic at future meetings.

Are we trying to recoup costs for projects already built or trying to ensure we have the money to build the next site? Allison: Are you just paying yourself back for the money that was already spent? The acquisition cost on this project may not come into play on future projects. There could be vacant land which is cheaper than land which contains a house. There are sites which contain a wetland on a portion of the site, but not all of it. In this example, you could potentially get re-establishment or creation credit, not just enhancement.

The Larchmont site needs to attain $90K per acre-credit to recoup the costs. That $90K would be used to build the next site. Do we use $90K as the cost per acre-credit amount or do we base the credit amount on what we anticipate the cost of the next site will be? You could total the costs to build both of these sites and then average that amount to come up with the per acre-credit amount.

KC will use the average amount to build numerous sites as their credit price.

You could have a chart containing specific project tasks and those costs i.e., grading costs, construction work, consumer price index (CPI), etc. When selecting a site, you could select from the chart the applicable tasks and then use the listed amounts to help determine the credit costs.

Larchmont is a more expensive site due to the land acquisition costs, housing demolition, and the fact that this site will predominantly get enhancement credit. Need to determine: If the tool isn't giving enough credits - which way do you go in the project design? Do you design the site to be ecologically appropriate or by how cheaply you can build it?

Additional costs which are not captured on the handout:

- Project management should be added to each category
- Administrative costs

ACTION: Annette will provide Patricia with some Environmental Consultants that PC has used in the past. Patricia will contact them and see if we can get some of the project cost numbers from them instead of trying to find estimates for costs on our own.

Annette left the meeting.

If PC is going to use properties that they already own – they would need to add in a land surcharge to the credit price calculation.

A Long Term Maintenance and Management (LTMM) fund will need to be established for each site. If a site is highly engineered, the LTMM plan will be more in depth. The advantage of an endowment fund is that at the end of the 10 yrs, the fund should be self-sustaining and would simply move over to the long-term steward.

Having to deal with all the rules, etc is the reason that PC is reluctant to be the sponsor. We have long-term protection, etc. in place for banking and ILFs, but they are not currently in place for permittee-responsible mitigation. All of these requirements make the costs go up. Hans sees a lot of costs going to administration and not to the actual project.

KC has a full-time staff to administer their program. This type of sponsorship takes devotion. An ILF sponsor has to be a natural resource agency.

We do not require an annual LTMM report from a bank sponsor. The reporting, etc. will be determined depending on the specific site.

The LTMM steward is separate from the conservation easement holder. The sponsor and the enforcement entity can't be the same entity; unless, it's a different program within that agency. Basically, you can't have the fox watching the hen house.

Continue to discuss this topic at a future meeting.

Larchmont cost per acre = $200,250.

Next Steps

Next meeting is in April at the Tacoma Mall Plaza, 2nd floor. (This meeting has been **CANCELLED**)

March 30, 2011 PSP ILF IRT Sign In

Name	Agency Representing	Email Address
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Karla Kluge	City of Tacoma	kkluge@cityoftacoma.org

Puget Sound Partnership Pierce County In-Lieu Fee Program
March 30, 2011 IRT Meeting, 10 am to 3:30 pm
Seattle District Corps of Engineers, Edsel Room

Agenda

1. Buy off on use of Credit Debit Tool (decision)

2. Buy off on how to track credits (decision)

3. Buy off on general process for how to release credits (decision)

4. Advance Credits
    a. What they are/background (selling to earn $ to get future sites on the ground)
    b. How many
    c. Rationale behind request

5. Cost of Credits
    a. What is included in the cost of a credit
    b. Example cost (estimate)
    c. Financial Assurances
        i. Contingency fund (% of credit cost goes into this fund)
        ii. Long-term maintenance and management endowment (% of credit cost goes into this fund)

6. Service Area Update/Check-in

Appendix A: Revised Credit Tracking and Release

Credit Tracking

Types of Credit

- Universal Credit – Lumps acre-points for each function bucket into one "credit" score *(use example for SMWR or Larchmont)*
  - Pros:
    - Do not have to worry about using up all credits in one of the function buckets and ending up with "extra" credits in another function bucket.
    - Easier for users of the ILF program (permittees, their consultants, permitting staff) to understand and apply.
    - Decouples the impact from the compensatory mitigation, thereby allowing the mitigation-receiving site to target the highest priority sites within the watershed, rather than having the selection and design of mitigation receiving sites be driven by a 1 for 1 accounting of lost functions.
  - Cons:
    - Loss of flexibility for permittees that provide some on-site compensation for a specific function(s).
    - Harder to determine if the ILF program is addressing no net loss of ecological functions.
- Function-Specific Credit – Acre-points for each of the function buckets (Water Quality, Hydrologic Function, Habitat Function) are kept separate resulting in a 3-part credit score
  - Pros:
    - More transparent tracking of functions lost and functions gained; easier to determine if no net loss of functions is being met.
    - Facilitate parsing out mitigation requirements. For example, compensation for some functions may be required on-site (e.g., critical habitat, flow control, water quality treatment). Any remaining debits to functions could use ILF Program.
    - Regulatory agencies may require function for function replacement.
  - Cons:
    - Harder for users to understand and apply.
    - More likely to result in credit accounting errors.
    - May run out of credits in a specific function bucket before all debits have been addressed, but still have a surplus of credits in another function bucket.

PSP proposes to use function-specific credits ~~**PSP proposes to use universal credits**~~

Credit Tracking Process

- PSP proposes to keep track of debits and credits in function buckets~~, but credit withdrawals would be from one universal bucket~~.
- See credit tracking ledger (spreadsheet)

Credit Release and Fulfillment

What is it?

- Process by which mitigation-receiving sites are designed, constructed, maintained, and monitored to ascertain if the site is meeting performance standards and functioning as proposed.
- Based on achievement of specific milestones during the short-term, regulatory monitoring period (~10 years), a portion of the proposed total credits for the site would be released.
- The specific milestones and the proportion of credits released will be identified in a credit release schedule.
- The IRT will review and have approval authority over multiple aspects of process including:
    - Selection of future mitigation-receiving sites
    - Mitigation-receiving site design
    - Proposed total credits (credit determination)
    - Performance standards, monitoring period, and protocols
    - Project milestones
    - Portion of credits released at each milestone
- Before any credits are officially released, it is assumed the IRT will perform site visits to confirm that the agreed upon milestone has been adequately completed.
- The ILF program will use the released credits to first fulfill the mitigation obligation from the sale of any advanced credits then for direct sale to compensate for wetland impacts (pre-capitalization mitigation-receiving sites).
    - Advance credits
        - Credits from an approved ILF program that are available for sale **prior** to being fulfilled in accordance with an approved mitigation project plan. **Impacts happen first.**
        - Sale of Advance Credits requires an approved ILF program instrument that meets all applicable requirements including **a specific allocation of advance credits**, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales.
    - Pre-Capitalization Credits
        - Credits from an approved ILF program that are released from an approved mitigation-receiving site and available for sale prior to impacts occurring. **Mitigation happens first.**
        - Proposed Credits – total credits (combined potential acre-points for all three functions) that should result from the gain in functions at the mitigation-receiving site based on the approved design.
        - Achieved/released Credits – credits resulting from the achievement of performance standards/milestones, the demonstrated gain in functions, or both.

Process for Release

- Milestones
    - Acquisition of mitigation receiving site by ILF program sponsor (or other qualified government or not-for-profit entity), site protection mechanism in place, or both
    - Mitigation-Receiving site constructed
        - As-Built plan/report submitted and approved
        - Completion of planting, particularly if done in phases (i.e., underplantings)
    - Achievement of performance standards

        - Hydrologic Standard (years 1-10) – at a minimum indicating that the site has a water regime that will support wetland conditions. Standard could also focus on if the water regime for the site is as proposed.
        - Vegetation standards (years 3-10) – survival (typically used in year 1), stem density (years 3-5), areal cover (years 5-10), acreage of vegetation communities (years 5-10), diversity
        - Function- based performance standards, such as acreage and duration of inundation regimes, depth of water storage, number of vegetation communities
        - Completion of wetland delineation (years 5 and 10)
        - Completion of credit calculation to determine if proposed gain in functions was achieved (year 10)
    - IRT signs off that the mitigation-receiving site has met all performance standards and the short-term regulatory monitoring period may be "closed-out." Mitigation-receiving site enters long-term maintenance and monitoring phase.
- How much to Release When (See example credit release table)

EXAMPLE CREDIT RELEASE SCHEDULE

Proposed Project Milestone	**Portion of Credit Released**	**Cumulative Portion of Fulfillment**
Site acquisition by sponsor or site protection mechanism in place (mitigation-receiving site plan approved by IRT)	1/8 at 0.9 risk factor	1/8
Installation (approval of As-Built)	1/8 at 0.9 risk factor	1/4
Year 1 performance standards achieved (primarily hydrologic)	1/8	3/8
Year 3 performance standards achieved	1/8 at 1.0 risk factor	1/2
Year 5 performance standards achieved	1/8	5/8
Year 7 performance standards achieved	~~1/8~~1/4	~~3/4~~7/8
Year 10 performance standards achieved (including delineation running credit debit tool) and transition to long-term stewardship (IRT sign-off on achievement of performance standards)	~~1/4~~1/8	Credit fulfilled

Appendix B:

Advance Credits Discussion/Request

What are Advance credits?

- Credits from an approved ILF program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Impacts happen first.

When and how can Advance credits be used?

- Sale of Advance Credits requires an approved ILF program instrument that meets all applicable requirements including a specific allocation of advance credits, by service area where applicable.
- The approved instrument must also contain a schedule for fulfillment of advance credit sales.
- If there is no allocation of advance credits, no advance credits can be sold.

For WRIA 12, Advance Credits would provide a backstop

- For a project with extensive wetland impacts needing more credits than are available for sale as "released" credits
- Due to demand, all released credits are sold. Advance credits could allow the ILF program to continue selling credits.

For WRIA 11, Advance Credits would allow the ILF program to provide compensation for impacts. Currently there is no pre-capitalization mitigation-receiving site in the Nisqually Watershed.

Number of Advance Credits allocated needs to be enough so that the money collected will be sufficient to implement a mitigation-receiving site.

Appendix C:

Red text indicates items that were added or revised by Ann Boeholt and are different from the document circulated at the meeting

Costs

Variables to consider:

- Recouping costs spent on existing projects vs. budgeting/calculating costs to fund future project(s)

Cost Categories:

1) Land
   a) Administrative Costs
   b) Project Management
   c) Appraisal,
   d) Environmental/hazardous assessment,
   e) Acquisition,
   f) Escrow fees,
   g) Closing costs,
   h) Taxes,
   i) Title report and
   j) Title insurance, and
   k) Asbestos Abatement
   l) Hazardous Waste Clean-up
   m) Demolition
   n) Permanent protection of the site (recording a conservation easement or restrictive covenant)

2) Planning
   a) Administrative Costs
   b) Project Management
   c) Identification and selection
   d) Wetland/biological assessments (delineation, rating, credit/debit tool)
   e) Surface/groundwater monitoring
   f) Survey
   g) Design
   h) Permitting
   i) Mitigation plan specifications and report
   j) Printing and Advertising for Public Works Contract

3) Construction and materials
   a) Construction Inspection
   b) Erosion control/pollution prevention (temporary)

c) Clearing, grubbing, excavation, site contouring
d) Pipes, culverts, weirs
e) Stockpiling soil, brush, logs
f) Hauling away materials
g) Amendments (e.g., gravel, compost, mulch, topsoil, ect.)
h) Fencing
i) Irrigation system
j) Plants/seeds
k) Project Closeout/as-built reporting

4) Maintenance and monitoring
   a) Water for irrigation
   b) Replacement and supplemental plants
   c) Weed control – time and manpower
   d) Weed control – mulch, fabric, mowers, etc.
   e) Monitoring – time and manpower
   f) Producing monitoring report
   g) Repair/replace structures
   h) Garbage removal

5) Contingency – recommended (by Corps?) to use 20% of estimated construction costs (Does this apply if site is already constructed and functioning?

6) Long Term Maintenance and Monitoring – Needs to be enough money to allow annual interest to equal annual withdrawal for activities (plus inflation) – costs may depend on who owns the land and who is responsible for the long term stewardships (how duties are divided).
   a) Annual monitoring and report production – labor & materials
   b) Maintenance – Will this be handled by PC SWM or by the easement holder?
   c) Administrative overhead
   d) Legal
   e) Enforcement
   f) Outreach to neighbors
   g) Emergency repairs
   h) Insurance /liability

7) Administration – costs involved in operating the ILF program
   a) Maintaining ledger – credit & debits and fees & disbursements
   b) Communicating with IRT
   c) Communicating with potential ILF program users
   d) Facilitating future site selection processes

8) Factor for inflation (consumer price index-CPI)

Land Costs and Preservation Credit

				Base Acre-Points				Earned Acre-Points						007	003		009										
Project Name	**HGM**	**Type**	**Acres of Treatment**	Wq	Hy	Ha	*Risk Factor***	Wq	Hy	Ha	**Total Function Acre-points**	**Acre-Points / Acre**	**Land Acquisition**	**Site Selection, Planning, Permitting & Design**	**Construction & Materials**	**Irrigation**	**Other Maintenance**	**Monitoring for Performance Standards**	*Conting %*	**Long-term M & M**	**10% of Design + Construct + M&M**	**Actual Administration and Staff Time**	**Total Project Budget**	**CPI Scaling Factor**	**2010 Adjusted (Using CPI)**	**Acres Preserved**	**Land Cost Surcharge**
Larchmont Wetland Reserve	riverine/ depressional	rehab/ enhancement	5.19	14.55	14.55	12.21	*0.9*	13.1	13.1	11.0	37.2	7.2	$1,172,000	$500,000	$1,200,000	$30,000	$50,000	$40,000	*15%*	$30,000	$182,000		$3,204,000	100%	$3,204,000		
SMWR	riverine/ depressional	Estab/ rehab/ enhance		0	0	0	*0.9*	0	0	0.0	0.0	#DIV/0!	$582,636	$200,000	$1,829,125	$160,000	$50,000	$40,000	*20%*	$30,000	$227,912	$357,550	$3,249,311	100%	$3,249,311		
							0.9	0.0	0.0	0.0	0.0	#DIV/0!							*20%*	$0		$0	$0	118%	$0		
			5.19					**13.1**	**13.1**	**11.0**	**37.2**														$6,453,311		

*Acre-point calculations subject to change as the tool is revised
** Risk Factor values are policy-based.

I deleted column for contingency. We have already figured contingency into the estimated cost of construction.

Larchmont Wetland Reserve
Stewardship Endowment
Calculation Worksheet

Activity	Hrs	Estimate	One Time Costs	Annual Costs
Transaction Costs				
Staff fee				
Transaction fee				
Legal drafting and review of document				
Appraisal				
Title Research				
Title Insurance				
Stewardship Costs				
Baseline Documentation				
Number of staff hours for initial site visit, mapping, and photodocumentation, at $50/hour	8		$400.00	
Cost of materials such as copies, etc.				
Number of staff hours for final report preparation, at $50/hour	24		$1,200.00	
Number of staff hours for review and revisions, at $50/hr	8		$400.00	
Ongoing Landowner Outreach				
I see no difference between Community and Landowner outreach. It is all community outreach, so let's delete this row.				$0.00
Community Outreach				
Number of staff hours to respond to neighbors of conserved land and responses to initial inquiries, at $50/hour	2			$100.00
Initial Public Meeting	16			$800.00
Develop and Maintain Website (8 hours to develop and 4 hours a year to maintain), at $50.00/hr.	8			$400.00
Annual website maintenance, at $50/hour	4			$200.00
Mailing and production costs			$800.00	
Number of staff hours per year for ongoing outreach (not including website maintenance) at $50/hour	2			$100.00
Liability Insurance				
Annual Estimate				
Monitoring and reporting				
Number of staff person hours per year spent monitoring, including site visit, mapping, photodocumentation, etc, at $50/hour	8			$400.00
Travel costs				$25.00
Cost of materials copies/postage/etc.				$10.00
Number of staff hours spent on report preparation, at $50/hour	4			$200.00
Active Restoration				
Number of staff hours per year - site restoration				$0.00
Restoration materials- estimate of annual costs				$0.00
Bioswale Maintenance				
Emergency Stewardship Action (Assume 1 problem per 10 years)- if affirmative obligations necessitate				
Estimate of planning and design of major stewardship emergency actions and repairs (blow downs, surface water issues, fire, etc.)				
Maintenance Division labor costs for emergency actions (52.42/hr).	16			$838.72
Maintenance Equipment Costs (at $100/hr)	16			$1,600.00
Annual stewardship emergency cost, total cost divided by 20				
Enforcement (Assume 1 problem per 20 years)				
Estimate of number of attorney hours, at $350/hour	20	$7,000.00		
Estimate of number of staff hours, at $50/hour	40	$2,000.00		
Estimate of total enforcement costs per 20 years		$9,000.00		
Annual enforcement costs (total enforcement cost divided by 20)				$450.00
TOTAL ONE TIME COSTS			$2,000.00	
(PLUS 5% CONTINGENCY RESERVE)			$2,100.00	
(PLUS First year costs)			$5,379.91	
TOTAL ANNUAL COSTS			$7,479.91	$5,123.72
(PLUS 5% CONTINGENCY RESERVE)				$5,379.91
ASSUMPTIONS				

1) Expected rate of return =8% (4% to be reinvested to keep ahead of inflation, 4% to cover annual expenses)

2) Public access, building envelopes, certain reserved rights and affirmative obligations will increase the costs of monitoring and enforcement

SUMMARY:	
One time costs:	**$7,479.91**
Total Annual Costs	**$5,379.91**
Endowment Necessary to fulfill annual costs (cost/.04)	**$134,497.65**
Total due	**$141,977.56**

Beaver Dam. Invasive Veg Control, Human homeless camps,

Bioswale Maintenance: Revegetate, reseed, dredge sediment, add topsoil.

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