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RESERVE

SUMMARY OF COMMENTS & RESPONSES DRAFT FOREST PROJECT AGGREGATION PROPOSAL

20 sets of comments were received during the public comment period for the Climate Action Reserve (Reserve) Draft Forest Project Aggregation Proposal. Staff from the Reserve summarize and provide responses to these comments below.

The comment letters can be viewed in their entirety on Reserve's website at <http://www.climateactionreserve.org/how/protocols/adopted/forest/aggregation/>

COMMENTS RECEIVED BY:

1. AgRefresh (AgRefresh)
2. Baldwin, Blomstrom, Wilkinson and Associates, Inc. (BBW&A)
3. Blue Source LLC (Blue Source)
4. CarbonVerde, LLC (CarbonVerde)
5. CE2 Capital Partners (CE2)
6. City of Arcata (Arcata)
7. Ecotrust (Ecotrust)
8. Element Markets (EM)
9. Environmental Services, Inc. (ESI)
10. Finite Carbon Corporation (Finite Carbon)
11. Hanes Ranch Inc. (Hanes)
12. North Coast Resource Management (NCRM)
13. New Forests Advisory Inc. (New Forests)
14. Northcoast Regional Land Trust (NRLT)
15. Northwest Natural Resource Group (NNRG)
16. Rocky Mountain Elk Foundation, Inc. (RMEF)
17. RRI Energy, Inc. (RRI)
18. Sierra Business Council (SBC)
19. Steve DeClerck (DeClerck)
20. The Pacific Forest Trust (PFT)

General Comments:

1. To what degree can we look to this proposed aggregation methodology as a framework for how CAR will approach aggregation for other project types? **(AgRefresh)**

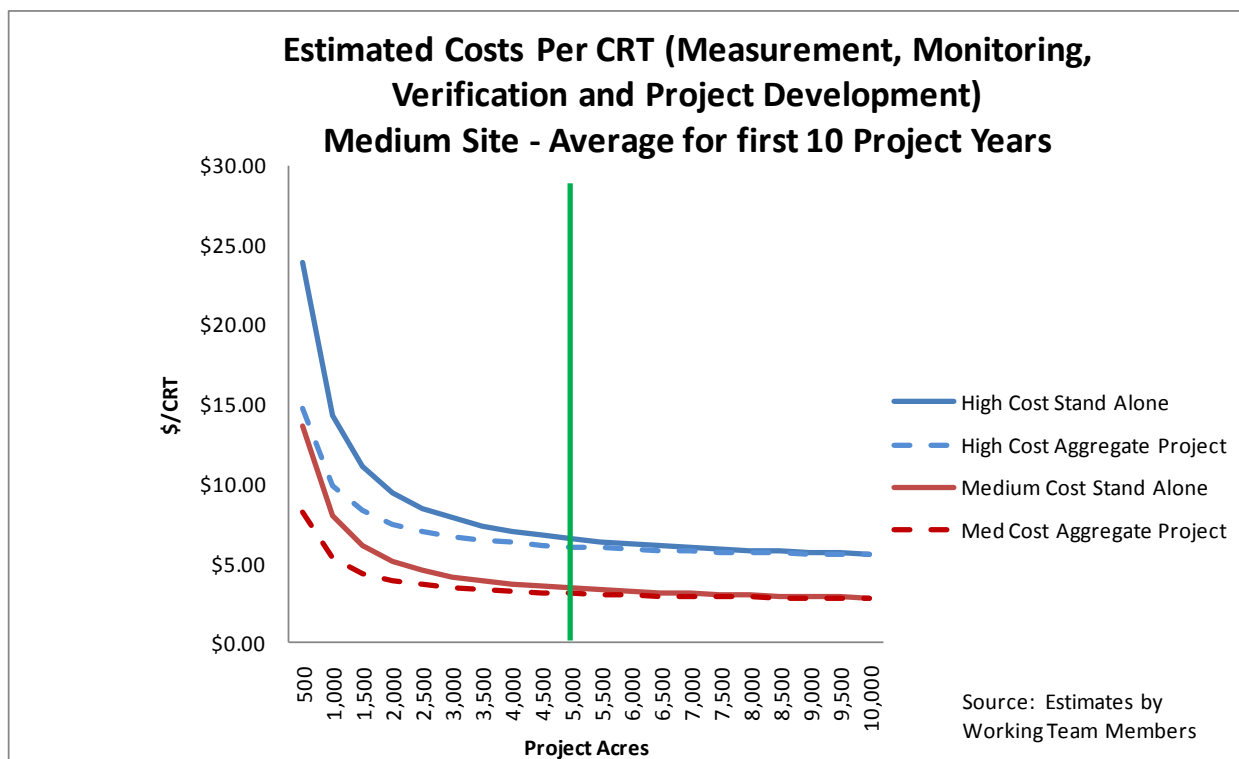
RESPONSE: As of yet, aggregation methodologies or approaches for other project types have not been under discussion.

2. The purpose of these project aggregation guidelines is to reduce the fixed compliance costs (verification, monitoring, project development, and transaction) for each project in order to make it economically viable for smaller projects to participate in the Climate Action Reserve. We encourage CAR to release the results of their economic analysis and modeling that was conducted regarding these aggregation guidelines. This will provide us with greater clarity about CAR's reasoning, the decision-making process, and on the impact of the guidelines on the economic viability of projects. **(AgRefresh)**

RESPONSE: Data on project measurement, monitoring, verification and development costs per CRT show wide variation depending on project size, inventory requirements, beginning carbon stocks, and site productivity. Current estimates of these costs vary from less than \$1.00/CRT to over \$60.00/CRT. Due to the limited amount of project cost history available, estimates are preliminary and somewhat theoretical. To understand economic viability of projects, additional analysis needs to be done for individual projects to assess opportunity costs for the landowner, hurdle rates for the investor, and expected future CRT prices. Evaluating these variables for a single project is challenging; in the context of developing guidelines for aggregation is extremely difficult.

Consequently, the decision-making process at the Reserve in developing aggregation guidelines was not a direct result of economic analysis and/or a set of economic models. The emphasis in developing the guidelines was how to maintain the statistical integrity of the inventory standards while allowing smaller projects in aggregated groupings to benefit from reduced costs associated with the reduced number of plots and site verifications required per property.

That being said, different kinds of analysis involving costs, such as cost curve charts, were contributed by work team members to assist with discussions regarding acreage limitations in the proposal. These cost curves consistently showed, over a range of values and iterations, that the proposed aggregation guidelines demonstrated benefits for projects less than 5,000 acres in size. An example of one of these charts is reproduced below and illustrates a set of results for medium productivity site (average of 1.5 CRT/acre/year for first ten project years) under both a "high cost" project scenario (costs related to remote location, complex baseline, low availability of pre-existing data, etc.) and a "medium cost" project scenario. The chart illustrates how under the proposed aggregation guidelines, the costs incurred for small projects (up to approximately 5,000 acres in size) can be lower than stand-alone projects and how these cost differences narrow at 5,000 acres and above.



- Individuals and families manage the vast majority of private forest land in our country, most with ownerships of less than 5,000 acres. The inventory, monitoring and verification costs associated with CAR forest carbon projects can be prohibitive for these family forest owners who lack economies of scale. I think this Aggregation Proposal would be a concrete, important step towards ensuring that the carbon markets work for the average landowner and not solely for industrial forest owners. **(BBW&A, NRLT, DeClerck)**

RESPONSE: Noted.

- The PIA agreement may be burdensome if separate agreements are required per project. An alternate approach is to develop a “Master PIA” with common conditions and exhibits that apply to all owners, along with “Tiered” owner-specific agreements containing conditions and a signature line particular to the owner. Clearly certain aspects of the PIA should be project specific, but there is the possibility to develop a “Master PIA” that incorporates all project specific material by reference or exhibit. This would be cleaner and less burdensome for project owners than maintaining a separate PIA per project. This model is similar to the structure now provided for amending the PIA when future CRTs are issued from the Forest Owner. In the case of a single landowner aggregation with multiple projects, the single PIA option is recommended. **(Arcata)**

RESPONSE: Due to project-specific dates related to the term commitment (100+ years), baseline, and verification, the Reserve will continue to require each Forest Owner to have a separate account with the Reserve and to sign a separate PIA for each project. This allows for accountability and transparency at the Forest Owner and project level and avoids the kinds of complications that might arise if a Forest Owner chooses to pull

projects from an aggregate or change Aggregators.

5. In general, we believe the Proposed Guidelines for Aggregation are workable for groups of smaller forest landowners. Though not included in the scope of these guidelines, we do remain concerned about the practicality of the Project Implementation Agreement and the length of project commitment. **(Ecotrust)**

RESPONSE: Noted. The 100-year commitment for maintaining carbon stocks was chosen to help ensure that forest-based carbon offsets will have a similar effect in mitigating climate change as offsets based on reductions in fossil fuel use. Forest owners can terminate the 100-year commitment at any time, provided that all of their project credits are replaced with Reserve forest carbon credits. This ensures that the credits will achieve the Reserve's standard.

6. I support the adoption of the Proposed Guidelines for Aggregation by the Climate Action Reserve, with a different system for managing landowner entry and exit [see below section], as soon as possible. In our case a carbon project may become the difference between the ranch needing to subdivide in order to pay inheritance taxes or being able to continue under one ownership. The money generated by a project will also facilitate a far more extensive land preservation and fire protection program on the property. **(Hanes)**

RESPONSE: Noted. For revisions to the guidelines on landowner exit, see response to Public Comment # 46.

7. Based on our financial analysis and modeling of current and much higher carbon values, small forest landowners (100 – 1000 acres) cannot shoulder the burden of annual CAR fees, initial site audit, 12 year verification audits, annual monitoring and the maintenance of FSC certification for 100 years. The maximum level of carbon that could be generated, even including growth, over 100 years will not provide enough revenue to cover the costs associated with participating in the CAR Aggregation program; much less provide any additional incentive for participation. An aggregation structure for these very small landowners, which may ultimately differ from groups of 3,000-5,000 acres projects, must be developed to recognize and lower the fixed costs of participation. **(NNRG)**

RESPONSE: The goal of the proposed aggregation guidelines is to facilitate participation from a broad cross-section of private forest landowners while maintaining an equivalent level of inventory accuracy and integrity as found in the stand-alone project standards. As this proposal is implemented, the Reserve will continue to look for ways to lower the compliance costs for small landowners. The maintenance of FSC certification is not a mandatory cost that a Forest Owner must incur for registration at CAR. FSC certification is one of multiple options available for the Forest Owner to meet the criteria of Natural Forest Management (See FPP Section 3.9.2).

8. Landowners that receive the initial carbon payments would be passing on to their children and/or the new owners of the property a significant burden to remain in the CAR registry program with or without an aggregator. Landowners would not only be foregoing development rights and committing to long term FSC certification (as many of our NW Neutral participants are already agreeing to), but they would also be agreeing to the ongoing costs of additional site visits and annual monitoring without any long term or ongoing revenue stream. The property

essentially becomes unsellable and not only encumbered with use and management restrictions but also with significant ongoing audit fees long after the first landowner has pocketed any (currently small) payments. Financial models must be developed and run through the entire project period to ensure monitoring and sustainability certification requirements can be met through the aggregation model. **(NNRG)**

RESPONSE: The Reserve has designed the proposed aggregation guidelines to lower the measurement, monitoring, verification and project development costs per CRT and make them more feasible for smaller acreage projects, while at the same time maintaining credibility in the creation of the offsets. The Reserve has maintained the standards of inventory accuracy and integrity found in the stand-alone projects. As projects are implemented and additional financial data are available, the Reserve will welcome additional input for adjusting this balance and ensuring that an increasing number of landowners can participate in the registry. The maintenance of FSC certification is not mandatory for Forest Owners to register at CAR. FSC certification is one of multiple options available for the Forest Owner to meet the criteria of Natural Forest Management (See FPP Section 3.9.2).

9. We have some concern over how this protocol would accommodate the unique relationship between landowners and land trusts. We urge CAR to develop and clarify protocols in order to facilitate land trusts and landowners participating in aggregation projects and to clarify how this type of aggregation would be feasible under the existing protocol. **(RMEF)**

RESPONSE: The relationship between landowners and land trusts is remarkably varied. A land trust may become an Aggregator, act as an agent for a group of landowners (their “grantors”) or potentially provide the expertise about protocols, inventory measurement, project development, submission forms, monitoring procedures, verification requirements, and so forth. A land trust may also join an aggregate as project participant. The aggregation language is intended to provide cost savings to all classes of small forest landowners.

Eligible Project Types

10. It seems that allowing all three forest project types to be enrolled under a single aggregate would provide greater flexibility to landowners/ project developers/ aggregators and would not have any impact on CRT integrity or permanence. **(AgRefresh, Blue Source, NNRG, RMEF, RRI, SBC)**

RESPONSE: The Reserve received 12 public comments regarding input on the ability for all three forest types to be enrolled under a single aggregate. Six comments advocated in favor of allowing different project types citing improved flexibility, increased participation, higher availability of Aggregators, and greater ability for the Aggregator to maximize their investment. Six comments endorsed limiting an aggregate to one project type citing Aggregator’s operational efficiency, verification complexity, and the need for uniform monitoring. The Reserve appreciates this input and, given the diverse response, will continue to allow aggregates to be comprised of a combination of the three project types so long as sampling accuracy and transparency are maintained. The Reserve expects the occurrence of aggregates where multiple project types incur high complexity

will be less common due to the high costs of monitoring and verification.

11. We encourage CAR to restrict aggregates to the same project type. **(CarbonVerde, EM, ESI, Finite Carbon, PFT)**

RESPONSE: See response to Public Comment # 10.

12. Given the structure proposed, we believe that a single aggregate should only allow one project type within a reasonable geographic area. **(CE2)**

RESPONSE: See response to Public Comment # 10 on project types. See response to Public Comment #13 on geographic area.

13. Requiring projects to be from the same geographic region would not allow the flexibility to landowners/ project developers/ aggregators that is needed to make this a successful program. In order to create an aggregate, there would need to be a critical mass of projects from that region, which could prove to be a significant hurdle to the use of these guidelines. This requirement will limit the flexibility of the methodology, without providing any substantial benefit. **(AgRefresh, Blue Source, Arcata, CarbonVerde, EM, ESI, Finite Carbon, NNRG, RMEF, RRI, PFT)**

RESPONSE: The Reserve received 15 public comments regarding input on whether or not projects in an aggregate should be from the same geographic region as defined by the ecoregions or assessment areas in Appendix F of the FPP. Twelve of the comments advocated against geographic restrictions to allow for greater flexibility, increased participation, broader competition and availability of Aggregators, and in order to allow single owners with tracts in different states to aggregate in one aggregate grouping. Three comments endorsed geographic restrictions but considered the ecoregions and assessment areas too restrictive and suggested larger geographies made of multiple assessment areas. The Reserve appreciates this input and, given that the principles supporting the case for reduced costs from aggregation are not affected by geographic disposition as well as the large response against geographic restrictions, will continue to allow aggregates to be comprised of projects from any geographic region in the United States.

14. We would like aggregated properties to be limited to a single ecoregion, but would support inclusion of properties from multiple assessment areas. If the goal is to lower costs, the verifier and foresters selected to assess the properties should not be asked to travel all over the country to perform their duties. By reducing the distance, inventories can be implemented consecutively by one RPF under a single contract. This would significantly reduce contractual costs to the landowners. This relates to verification activities as well. **(SBC)**

RESPONSE: See response to Public Comment # 13.

15. The proposal to require that projects enrolled in one aggregate all be from the same geographic region is generally a good idea in order to limit complexity, but we see that the ecoregions and assessment areas defined in Appendix F of the FPP would be too limiting. We suggest selecting a larger region or leaving the boundary up to the aggregated group. **(Ecotrust, New Forests)**

RESPONSE: See response to Public Comment # 13.

16. It is critical to note that if CAR limits aggregations to including only one project type, that they do not eliminate other portions of the same ownership from being included under a separate aggregate. There are likely landowners which have opportunities for two, or even three, successful project types within the same landholding, and should be allowed to develop projects capturing all opportunities. **(ESI)**

RESPONSE: See response to Public Comment # 10.

17. It is anticipated that broadly-varying project locations will be self-excluding from projects as a result of the requirement for initial field verification of all projects, since travel costs will be significantly higher for widely-dispersed projects. It is critical to note that this would require the waiving of the similar requirement for stand-alone projects found in Section 4 (page 18) of version 3.1. Retaining this requirement for stand-alone projects while waiving it for aggregations would create an unintended incentive for single projects to seek unnecessary aggregation. **(ESI)**

RESPONSE: Currently, the FPP contains a restriction for single projects to have geographic boundaries that "...must not extend beyond the boundaries of an Assessment Area by more than 10 percent of the Forest Project's total area..." (FPP, Section 4). The protocol further stipulates that a Forest Project that involves "...activities in multiple Assessment Areas must be submitted as separate Forest Projects." These requirements are relevant to the geographic boundaries for an individual project and not meant to be interpreted as restrictions for a group of projects in an aggregate. The ability for an aggregate to have a dispersal of single projects across multiple Assessment Areas is consistent with this policy so long as the individual projects meet the geographic restrictions of the policy.

Number of Landowners

18. Family forests (small private landowners) comprise approximately 60% of all privately-owned acres in the U.S. We believe that there should not be a limit on the number of landowners allowed to participate in an aggregate. **(AgRefresh, CarbonVerde, CE2, Ecotrust, ESI, Finite Carbon, New Forests, NNRG, RMEF, RRI, PFT)**

RESPONSE: The Reserve received 12 public comments regarding input on the whether or not there should be a limit on the number of participants in an aggregate. Eleven of the comments advocated against limits to the number of participants citing increased management efficiencies, cost savings, greater ability for the smaller acreage landowners to participate, and limitations on participant numbers are unnecessary with acreage limitations. One comment endorsed limits citing higher administration, monitoring and verification costs with high landowner numbers. The Reserve appreciates this input and, given the response largely supporting guidelines without participant number restrictions, will add language to allow aggregates to be comprised of an unlimited number of participants. The Reserve expects the economics of management efficiencies to become a self-limiting determinant to the appropriate total number of landowners in an aggregate.

19. There should not be a limit on the number of participants in an aggregate. As an alternative one could set an upper and lower limit to what constitutes a project. **(EM)**

RESPONSE: See response to Public Comment # 18.

20. SBC would like some type of limitation to the number of participants in an aggregate. This limitation may be a maximum total acreage or maximum number of participants. If 500 landowners were participating with varying property sizes, the administration costs by the aggregator would significantly increase, as would the inventory and verification costs. Also, the TSE never changes above 15 participants, meaning that more extensive inventories will need to be completed on larger aggregates to reach the 20% TSE, causing a disproportionate cost to participants relative to property size. **(SBC)**

RESPONSE: See response to Public Comment # 18.

Acreage Limitations

21. Page 2: It is unclear what the statement “no forest owner may enroll more than 5,000 acres in aggregates (single or multiple)” means. For example, if 10 projects of 600 acres each in different parts of the country are aggregated, it would add up to more than 5,000. So how would that work? **(EM)**

RESPONSE: The 5,000 limit on acreage allows any Forest Owner to enroll up to 5,000 acres in an aggregate (or aggregates). Any acreage after 5,000 would need to be in standalone projects. The limit is triggered by total acreage enrolled by Forest Owner instead of the amount of acreage in any one project or aggregate. The Forest Owner can keep up to the first 5,000 acres in the aggregate(s) for as long as they want. In the example provided in the comment, the Forest Owner would only be allowed to enroll 8 of the 600 acre projects in aggregates; the 9th and 10th projects would have to be submitted on a standalone basis.

22. If the 5,000 acre limit is applied to the total acreage enrolled by the forest owner, it seems that this will hinder the stated goal of enabling projects below the 5,000 acre viability threshold to participate. For example, a forest owner would be unable to place 2 parcels of 3,000 acres each into aggregates. Therefore, even though both of these projects are below the 5,000 acre threshold that CAR has determined to be economically viable, they would be ineligible to take advantage of the aggregation protocol. Over time many landowners may acquire additional land which may need to be aggregated in order to be economically feasible, however, if they already have a total of 5,000 acres committed to existing aggregates, they would be stuck. It seems likely that organizations such as land trusts, will quickly exceed the 5,000 acres limit, and will continue to acquire additional parcels over time, but each parcel would not be viable as a stand-alone project. As carbon markets develop in the U.S., and more landowners learn about the Reserve and how to participate, we want to encourage people to acquire additional lands that they can place into projects. The 5,000 acres limit from any one landowner to use the aggregation protocol, will dis-incentivize those with the resources to acquire several smaller projects and increase the total number of smaller projects over time. **(AgRefresh)**

RESPONSE: The overriding intent of the aggregation guidelines are to enable small

landowners, who comprise the bulk of forest owners nationally, to achieve the economies of scale that larger landowners enjoy in relation to fixed costs. The 5,000 acre limit is intended to result in a more level playing field for these smaller landowners, not necessarily for all smaller projects. Forest Owners with greater than 5,000 acres can benefit up to an enrollment of 5,000 acres and can keep up to the first 5,000 acres in the aggregate(s) for as long as they want. However, after 5,000 acres has been enrolled in an aggregate, or aggregates, a Forest Owner will need to submit projects on a standalone basis. The guidelines have been established as a way to avoid “gaming” by large landowners while at the same time allowing large landowners to test the waters with smaller project(s) in an aggregate, or aggregates, before taking the potentially bigger risks of a standalone project.

23. We support a 5,000-acre limit for the size of each project enrolled in an aggregate. But we recommend that forest owners be allowed to enroll multiple projects in aggregates but with a higher acreage limit for the ownership’s total size, as long as they are able to provide sufficient justification for dividing their forests into independent projects. Appropriate justification may include, but not be limited to, projects being geographically independent or being registered in different years.

It is unclear why the total ownership of a participating Forest Owner is also proposed to be limited to 5,000 acres. Although placing such a limit on the size of any individual project may seem reasonable, placing the equivalent limit on the total ownership of the entity wishing to enroll multiple projects makes less sense, especially given the cost efficiency reasons stated in the footnote to this section in the draft proposal.

We do believe that large commercial ownerships are not the intended users of this Aggregation option for project development so having an upper limit in ownership size such as 10,000 acres is important to ensure that the aggregation option is limited to ownerships that have less resources available for investment in project development and maintenance. **(PFT)**

RESPONSE: See response to Public Comment # 22.

24. We want to voice some concern that while 5,000 acres seems sufficient to enable an economically viable project in less carbon rich forests such as the drier interior conifer forests of California, we are not certain this same metric would apply in other forest types around the country. We urge CAR to review the carbon stocking and productivity data it has to better assure that this is a reasonable size in other regions. **(PFT)**

RESPONSE: In practice, it is impossible to define a consistent rule related to acreage or CRT yield that is 100% accurate in distinguishing projects that are financially viable on their own from those that aren’t. The Reserve has used a 5,000 acre limit as a limit that would capture most of the projects nationwide that would not be financially viable as standalone projects but which could be if they could achieve economies of scale similar to larger properties.

An additional argument for the acreage limit at 5,000 comes from the statistics on the size of forest landholdings. Landholdings under 5,000 acres comprise approximately 75% of the total area of privately-owned forest land in the United States. Most forest projects that are being submitted to the Reserve are from landowners that have in excess of 5,000 acres. These landowners represent just 0.1% of the forest landowners

nationwide. Without some way to make the upfront and fixed costs more reasonable for the other 99.9 % of forest landowners with fewer than 5,000 acres, such landowners will find it difficult to participate as costs per CRT can be prohibitive. Broader participation in the scheme will allow some smaller landowners to achieve the same economies of scale that the larger landowners currently enjoy. See table below:

United States						
Size Class (acres)	Total Area ('000 acres)	No. of Owners (000's)	Cum. Area ('000 acres)	Cum. Owners (000's)	Cum. Area (% of total)	Cum. Owners (% of total)
1-9	20,661	6,821	20,661	6,821	5%	61%
10-19	18,475	1,496	39,136	8,317	10%	75%
20-49	42,591	1,465	81,727	9,782	22%	88%
50-99	44,020	683	125,747	10,465	33%	94%
100-199	43,770	372	169,517	10,837	45%	98%
200-499	47,300	185	216,817	11,022	57%	99%
500-999	25,578	45	242,395	11,067	64%	100%
1,000-4,999	42,229	28	284,624	11,095	75%	99.90%
5,000-9,999	12,677	2	297,301	11,097	78%	99.92%
10,000+	82,617	9	379,918	11,106	100%	100.0%
Total	379,918	11,106				

Source: Forest Resources of the United States, 2007

25. While the requirement that no single project can exceed 50% of the total combined acreage in the aggregate is important to maintain the statistical significance of the forest sampling, this results in an aggregate needing a minimum of three projects. CAR should develop an adjustment so that aggregates can be formed from two projects. **(AgRefresh, Blue Source, Arcata, RRI, PFT)**

RESPONSE: Agreed. The proposal will be changed to accommodate aggregates formed from two projects to allow for a single project to add up to 70% of the total combined acreage.

26. Because individual landowners may have different project opportunities arising at different times and under different circumstances, absolute acreage limits should be based on a per project, rather than per-landowner basis. **(Blue Source)**

RESPONSE: See response to Public Comment # 22.

27. The assumptions used to limit enrollment to 5,000 acres are based on expected prices for CRTs from IFM projects. The economic feasibility of avoided conversion projects are sensitive to different factors. We encourage CAR to not limit the size of projects based on acreage. **(CarbonVerde)**

RESPONSE: The project size limitation is based on estimations of the ability for small landowners to achieve the economies of scale that larger landowners enjoy in relation to fixed costs. Other factors, such as assumptions about future CRT prices were not

involved in determining these guidelines. Evaluating future CRT prices is extremely challenging. Modeling future pricing includes predictions of legislation, regulation, fossil fuel supply, alternative energy supply, energy demand and offset supply just to name a few factors. In addition to pricing, economic feasibility for a project is also dependent on factor such as investor hurdle rates and landowner opportunity costs. These are very project specific. The 5,000 acreage limitation is set based on the acreage where the fixed costs on project measurement, monitoring, verification and development costs per CRT generally become similar with aggregated and standalone projects. For more discussion see responses to Public Comments #2, #22, and #24.

28. We agree that no single project should comprise more than 50 percent of the total combined acreage in an aggregate, but we do not believe there should be a limitation on acreage size. A forestry carbon project of 5,000 acres is not always large enough to justify a carbon project, as there are a number of fixed costs associated with baseline reporting and monitoring and verification. We believe that as long as there is a limitation on a percentage basis, there should not be a 5,000 acre limitation. **(CE2)**

RESPONSE: The Reserve understands the acreage limitation rule will leave out some landowners with greater than 5,000 acres that remain financially unviable and include some landowners with less than 5,000 acres that in fact have viable standalone projects. Nevertheless, the Reserve has proposed this limitation because it would be a greater risk not to design a rule structure that creates a more even playing field for the smaller landowners that represent 99.9% of the forest landowners in the United States as compared to the .1% of forest landowners that can more readily take advantage of the current protocol. For more discussion see responses to Public Comments #2, #22, and #24.

29. Regarding the participating landowner size limits, we believe that restricting the enrollment to 5,000 acres may not allow for all projects that would benefit from aggregation. In our experience in evaluating projects, there are many forests that are estimated to produce lower per unit area volumes of salable carbon over larger acres. This may be because of the condition, elevation, eco-region, or site characteristics of these forests, not the size of them in acres. **(Finite Carbon, RMEF)**

RESPONSE: The 5,000 acre limit is based on a variety of CRT yield scenarios on low-site properties suggested by work team members, some less than one CRT per acre per year. See responses to Public Comments #28.

30. We suggest that the criteria for eligibility be set preferably on the projects productive potential vs. the project area. In our view, projects not capable of producing 100,000 CRT's in the first 10 years of participation should be aggregation candidates. If project production is not a viable metric on which to determine eligibility, we suggest raising the area cut off to 10,000 acres. **(Finite Carbon)**

RESPONSE: See response to Public Comment #28 and #29.

Qualifications and Role of Aggregators

31. CAR has indicated that it expects Forest Owners to ultimately be responsible for holding their own accounts with the Reserve, submitting all required forms and complying with the terms of the FPP. This leaves Aggregators in the role of service providers; however, CAR mandates that such Aggregator must manage CRT transactions. We believe that this creates unnecessary complications, as Forest Owners are responsible for implementing and managing a carbon project, but Aggregators are responsible for managing the credits. We believe that Aggregators should be allowed to take responsibility for the entire process. CAR may still require each Forest Owner to sign the PIA, but rather than require each Forest Owner to open its own account and submit all required forms, an Aggregator should be able to submit a single aggregate that groups all such Forest Owners into one project. **(CE2)**

RESPONSE: One of the issues with allowing Aggregators to combine all properties into one project is the difficulty of untangling one or more landowners if they subsequently decide to leave the aggregate. In order to allow for entry and exit flexibility on the part of an individual landowner, the proposed aggregation guidelines require each Forest Owner to have a separate account and to submit all required documentation for each participating project. Other issues include the contractual commitments necessary from each Forest Owner with the Reserve setting forth the obligations of that owner to comply with the FPP as well as the rights and remedies in the event of failure to comply. Although, the Reserve expects in many cases, the Aggregator will be engaged to provide many services to the Forest Owner, the individual Forest Owner retains the ultimate responsibility to meet all the requirements of the FPP.

32. CAR should consider some additional criteria or requirements for becoming or maintaining the status of an aggregator. Landowners will need a reliable source of information on the history of aggregators' performance. **(Ecotrust)**

RESPONSE: Noted. After the guidelines are implemented and a history of Aggregator transactions develops, the Reserve will consider what additional criteria may be required for an Aggregator to establish an account on the Reserve. The current proposal parallels the same requirements as those for a broker, retailer, or trader account.

33. It is our concern as a landowner advocate, that those organizations that would serve as aggregators would facilitate the initial CAR registration with landowners but when the land was no longer providing the aggregator any additional revenue the relationship would be terminated and the landowner would then be holding the burden of maintaining the registration without aggregation or the expense of pulling out of the program. The aggregation protocol drafted seems to be aimed at facilitating easier participation of aggregators, and not as focused on facilitating participation of smaller landowners as should be the goal of an aggregation structure. While a "safety net" time period to allow landowners whose aggregator has withdrawn or failed may help, it should be recognized that there may not be any remaining incentive for a new aggregator to pick up these landowners during the 100 year period after the carbon has been sold. Perhaps a structure similar to the way Land Trusts deal with conservation easement transfer would be appropriate but the feasibility must be considered for landowners if their aggregator withdraws. It should not be assumed that private contracts will be developed to cover these eventualities, nor that contracts will be structured in the benefit of the landowners and forests. **(NNRG)**

RESPONSE: In order to be successful, the aggregation guidelines need to provide incentive for both Aggregators and small landowners to participate. The question raised in this comment is whether or not the contractual relationship between the Aggregator and landowner would provide landowners with the long-term assurances needed in the event that the Aggregator ceases to exist or for some other reason is no longer qualified or able to provide services to the landowners in the aggregate. Although the Reserve is aware of these concerns, it is not in a position at this point in time to oversee or enforce contractual arrangements between Forest Owners and Aggregators. The Reserve will continue to explore options for providing long-term assurances for Forest Owners as it gains further experience with aggregation efforts.

In the case of termination of a contract between the Forest Owner and Aggregator or if an Aggregator ceases to exist or is unable to provide aggregation services, the Forest Owner may choose a replacement Aggregator or decide to withdraw and retain a standalone project. The Reserve will add guidelines that give the participating Forest Owners 24 months to indicate replacement Aggregator(s) while account activities are suspended before requiring that Forest Owner to become a standalone project.

34. We continue to urge CAR to not be too limiting in its definitions of Forest Owners and Aggregators. A management regime that results in sequestration of carbon may involve permanent land protection (such as through a conservation easement) that could also spell out management requirements. At the same time, the fee title owner and the land trust can mutually decide which entity is entitled to the portion of the property rights that constitutes the carbon sequestration right. Aggregation should make it easier for landowners and land trusts to cooperate to provide for good land stewardship with an increased opportunity to attempt to market sequestered carbon. **(RMEF)**

RESPONSE: A Forest Owner is defined in Section 2.2 of the FPP as follows:

“A Forest Owner is a corporation or other legally constituted entity, city, county, state agency, individual, or a combination thereof that executes the Project Implementation Agreement (see Section 3.5). Generally, a Forest Owner is the owner in fee of the property involved in a Forest Project. In some cases, one entity may be the owner in fee while another entity may have an interest in the trees or the timber on the property, in which case the Reserve will make a determination as to whether both entities are required to execute the Project Implementation Agreement and thereby collectively be considered the Forest Owner.” (FPP, Section 2.2)

For a Forest Project to be eligible for registration with the Reserve, the Forest Owner is required to enter into a Project Implementation Agreement (PIA) with the Reserve. A critical issue for the Reserve is to determine what entity has the ability to fulfill the obligations of complying with the FPP and be subject to the rights and remedies of the Reserve in the event of any failure to comply with these obligations. The Reserve will continue to retain the ability to approve of what entity is defined as the Forest Owner based on this qualification.

Aggregators are defined by establishing an account on the Reserve and the submittal of an “Aggregator Document.” Aggregators act as agents for the Forest Owners will have a

contractual relationship with the Forest Owner, but will not have a separate contractual relationship with the Reserve. The Forest Owner will retain the ultimate responsibility for all project-related tasks under the PIA they sign with the Reserve.

Aggregation is expected to assist landowners and land trusts provide for good land stewardship and increased opportunities to market sequestered carbon by reducing fixed costs for small landowners.

35. Can multiple entities act as a single aggregator? For example, SBC acts as an aggregator for Land Trust properties, where SBC provides initial project development, but the LT manages the flow of ongoing monitoring and verification reports and acts as the “credit agent”. This would allow for more flexibility and less risk on the part of the landowner, since they are already working with the Land Trust on other rights to their property. **(SBC)**

RESPONSE: The Reserve will require one entity to set up an Aggregator account on the Reserve, form the aggregate with the required “Aggregator Document,” enter into contracts with the Forest Owners, and manage the Aggregator account. However, it would be acceptable for an Aggregator to subcontract work, e.g., calculation of inventory standards and preparation of ongoing monitoring and verification reports, to a different entity.

36. A policy level question relates to whether or not a landowner can serve as their own aggregator. The City of Arcata supports this ability since we are intending to submit three parcels with separate baselines. **(Arcata)**

RESPONSE: Yes, a landowner can serve as their own Aggregator or as an Aggregator for a group of projects when they are the Forest Owner for one or more of the projects. In this case, separate accounts must be set up and maintained for the Aggregator and for each project. Also in the case of a project where the Aggregator and the Forest Owner are the same entity, the contract between the Aggregator and the Forest Owner may take the form of a memo or MOU.

37. Individual project owners with multiple projects and project types should be able achieve the inventory and verification cost benefits offered under this methodology. **(Blue Source)**

RESPONSE: See responses to Public Comment # 10, # 22, and # 24.

38. The aggregation guidelines do not discuss any requirements should an aggregator go bankrupt or otherwise cease to be a viable aggregation service provider. In the event of bankruptcy of an aggregator or other event that prevents the aggregator from providing aggregation services per its contractual obligations to the participating Forest Owners, we would recommend that the Reserve require the participating Forest Owners to indicate their association with another aggregator within one calendar year. Not all participating Forest Owners would have to associate with the same replacement aggregator, and the replacement Aggregator(s) could be a participating Forest Owner or any other individual/validly incorporated business entity. **(New Forests)**

RESPONSE: See response to Public Comment # 33.

39. We would like more information on the consequences faced by an aggregator who would like to quit or pass the role on to someone else, or in the case of the participants relieving the aggregator due to lack of satisfactory services. **(SBC)**

RESPONSE: The consequences of contract termination will need to be covered in the individual contracts between the Aggregators and Forest Owners. The Forest Owner will retain the ultimate responsibility for following all of the requirements of the FPP. See response to Public Comments # 33 and # 46.

40. Qualifications and Role of Aggregators should be cross-referenced to the “Accounts on the Reserve, Transfers and Sales of CRTs” section below, which states that the forest owner must transfer CRTs to its aggregator before such CRTs can be sold or transacted. This section states that the aggregator must manage transactions of CRTs generated by the project participating in its aggregate. But explicitly stating here that such transactions can only take place after a forest owner has transferred his/her CRTs to the aggregator will help eliminate any ambiguity concerning the timing of CRT transfers and transactions. **(PFT)**

RESPONSE: Agreed. Edits will be made for clarification.

41. We recommend the insertion of a table on p. 4 outlining the required and potential roles and responsibilities of aggregators and forest owners. At a minimum, the “Qualifications and Role of Aggregators” section could be rewritten in a way that more clearly separates the required responsibilities of an aggregator from those responsibilities that are optional or subject to negotiation/contractual agreement between the forest owner and aggregator. **(PFT)**

RESPONSE: Agreed. Edits will be made for clarification.

Forming an Aggregate

42. Although the previous section states that individuals and municipalities may be aggregators, the language in this section needs to be broadened to make sure they understand what they are to provide as a part of their Aggregator Document in order to satisfy the requirement for “Proof of incorporation and good standing of corporate entity” which, as it stands, would exclude these entities. **(PFT)**

RESPONSE: Agreed. Language will be added to be more inclusive of the requirements for individuals, and municipalities.

Joining and Leaving an Aggregate

43. Pg. 5 states, “Copies of any contract(s) between Forest Owner and Aggregator” will be required as part of an “Aggregate Entry” form. As this information is likely to contain financial and other potentially confidential terms of an agreement, we ask why this is necessary, and how it will impact the project or aggregate, given the other information that can be included in the form. It may be more appropriate for the Aggregate Entry form to include a certification statement specifically clarifying the information that CAR needs to know. At the very least, any contracts

should not be made public. **(AgRefresh, Finite Carbon, New Forests, PFT)**

RESPONSE: The Reserve will require copies of any contract(s) between Forest Owners and Aggregators to approve the entry of a participant in the aggregate. This review is needed in order to ensure that the contract(s) are consistent with, and subordinate to, the Project Implementation Agreement (PIA) between the Reserve and the Forest Owner. The Forest Owner will have the option of whether or not their contracts with Aggregators are made available to the public.

44. CAR states that the Reserve staff will need to view copies of any contract(s) between Forest Owner and Aggregator. We do not believe that such agreements should be disclosed or submitted to CAR as they are private transactions. It should be sufficient to provide affirmation that the Aggregator has all the rights necessary in order to represent the Forest Owner. The commercial terms between Aggregator and Forest Owner should remain confidential between the two parties. **(CE2)**

RESPONSE: See response to Public comment # 43.

45. To prevent any potential confusion, it should be stated in the second paragraph that the on-site verification required prior to entry into an aggregate would be based on the inventory standards required for aggregated projects and not on those required for independent projects. **(PFT)**

RESPONSE: Agreed. Edits will be made for clarification.

46. By the very nature of developing these projects that are designed to last at least 100 years, several different parties are entering into a very long-term relationship. We recognize the need to maintain the overall targeted standard error of the aggregate, but requiring projects to continue to participate in the aggregate unless there have been a sufficient number of new entrants to maintain the overall targeted standard error seems impractical. In a dynamic and rapidly changing marketplace and economy, this requirement will effectively create a mechanism through which landowners may be locked into the aggregate. Obviously, the permanence of the projects and reductions needs to be insured, but locking landowners into the aggregate seems like it may substantially prevent participation from projects that would otherwise be involved. As an alternative, given that projects are responsible for their own reversals; if a landowner decides to leave, perhaps the verification schedule and targeted sample error should be changed accordingly. **(AgRefresh, SBC)**

RESPONSE: Agreed. The Reserve received 11 comments on the language that “Projects may only leave an aggregate if there have been a sufficient number of new entrants to maintain the overall targeted standard error for the aggregate at the level used during the aggregate’s most recent verification.” This policy has been revised as follows:

“In the event a project leaves an aggregate for any reason, and there are not sufficient numbers of participants prior to the project’s departure to maintain the overall targeted standard error for the aggregate at the level used during the aggregate’s most recent verification, the aggregate has 12 months from departure of the participant to either add a sufficient number of new participants to maintain the overall targeted standard error or make adjustments to the standard error target which will apply to all of the remaining participants.”

The remaining individual Forest Owners in the aggregate will be responsible for the impacts that may occur due to the changes in target sampling errors caused by variations in the numbers of participants in an aggregate. This includes application of any confidence deductions and compensation for any reversals as specified in FPP (FPP, Section 7.3).

47. I suggest that the Reserve allow Projects to leave an aggregate even if doing so results in a revised inventory confidence deduction for those Projects remaining in the aggregate. Projects joining an aggregate should be aware that their inventory confidence deduction could be subject to fluctuations due to changes to the aggregate composition, and as long as they accept this risk when they enter the aggregate, the Reserve should not need to incorporate a limitation on Projects exiting an aggregate. Perhaps each aggregator should design an internal CRT buffer to deal with the uncertainty of Projects leaving the aggregate? The CRT reserve could be tapped into in order to compensate for any increase in the confidence deduction that would be required if the standard error requirements are no longer met by the participating projects (which may or may not be the case). **(NCRM, PFT)**

RESPONSE: See response to Public Comment # 46.

48. The requirement for an aggregator to maintain a constant number of landowners by finding a new one when one wants to leave is problematic. Since the concern is statistical validity, the rule should be based on the overall sampling error which could easily remain within acceptable limits even after losing one project. **(BBW&A, Hanes, Finite Carbon)**

RESPONSE: See response to Public Comment # 46.

49. Statistical impacts can be managed through either the addition of new participant lands or by adding sufficient samples over a period of time in order to maintain compliance. We suggest a one year period for Aggregators to meet this compliance criteria. **(Finite Carbon)**

RESPONSE: See response to Public Comment # 46.

50. To improve landowner comfort with joining an aggregate, they should be afforded the ability to leave an aggregate at will, subject to their individual project, and the remaining aggregate, being subject to modified inventory and monitoring requirements going forward. If the aggregator or other aggregate members wish to impose additional requirements on joining or leaving an aggregate, they can do so via contractual mechanisms subject to individual negotiation rather than CAR dictate. This will maximize flexibility and participation rates for all parties, without compromising CRT integrity in any way. **(Blue Source)**

RESPONSE: See response to Public Comment # 46.

51. If a landowner needs to exit for one of many common reasons (e.g. financial circumstances), a small aggregated landowner would face a significant barrier to exit on top of the "buy-out" requirements in the Protocol. I would strongly recommend that the Reserve consider an alternative mechanism to manage entry and exit of landowners in aggregates. **(DeClerck)**

RESPONSE: See response to Public Comment # 46.

52. Landowners with whom we have spoken would prefer managing the risk of changing confidence deductions over the risk of being unable to exit an aggregate. [See public comment submission for more detail and confidence deduction example.]

We would recommend that CAR consider an alternative mechanism for addressing this issue, one that would: (1) Enable landowners to enter and exit the aggregate at will, subject to filing the required forms and meeting the requirements of a stand-alone project if they wish to retain a project on exit; (2) Enable remaining landowners to have a grace period before the target sampling error is changed due to a change in aggregate membership. This will give the landowners and aggregator time to find replacement members, or landowners time to invest in additional inventory plots to reduce their sampling error should they desire to avoid any possible confidence deductions; and (3) Use additional alternative approaches if necessary to reduce any remaining possibility of reversals caused by shifting TSE and changing confidence deductions. **(New Forests)**

RESPONSE: See response to Public Comment # 46.

53. Inventory confidence level has not been a major difficulty with our small landowner projects. **(NNRG)**

RESPONSE: Noted.

54. If a landowner is forced to leave an aggregate (not leaving by will) – for example catastrophic wildfire and their buffer pool is deleted or they go bankrupt - do the remaining projects in the Aggregate need to find a replacement to maintain their TSE? Can they move down the ladder to a TSE for one project fewer in their Aggregate? **(SBC)**

RESPONSE: The remaining participants in the aggregate may need to adjust their target sampling error (TSE) depending on the total number of projects remaining in the aggregate. See response to Public Comment # 46.

55. The Reserve could levy a penalty fee on the departing owner for opting out that would be distributed amongst the remaining participating forest owners of the aggregate in order to defray any costs associated with having to increase their sampling intensity to achieve the aggregate's new target standard error.

In the event that a project leaves the aggregate and triggers a Reversal, the costs of this should also be addressed more explicitly so that participants have a clear understanding of the full range of implications. In particular, it would help to state that a terminated project leaving an aggregate is still subject to the project termination requirements specified in the Forest Project Protocol, including funding the Intentional Reversal. **(PFT)**

RESPONSE: See response to Public Comment # 46.

56. It appears that there is a conflict between the section of Joining and Leaving an Aggregate describing the limitations on a landowner's ability to leave an aggregate associated with statistical confidence (page 5) and the Inventory Standards for Participating Projects (page 6) – the Joining and Leaving an Aggregate section refers to a minimum targeted standard error (TSE) of 15% for the aggregate, whereas the Inventory Standards for Participating Projects

seems to indicate that the TSE for the aggregate remains 5% regardless of number of participants (however, the project-level TSE can vary depending on number of participants). Assuming that the guidance provided in the Inventory Standards for Participating Projects is valid, ESI believes that it is not the place of CAR to require a landowner to remain within a contractual agreement with an aggregator; instead, CAR should hold the aggregator responsible for maintaining the required statistical confidence, hold the landowner responsible for the severability of their contract (PIA) with CAR, and allow the aggregator and landowner to address severability of their contract, through the terms of their contract. **(ESI)**

RESPONSE: Edits will be made for clarification. See response to Public Comment # 46.

57. Our greatest concern with this section is in regard to the level of detail spelled out in the requirements and guidance provided for a project entering and leaving an aggregate. This relatively cursory section should provide a much more thoroughly detailed process for a forest owner to follow, especially in the case of leaving an aggregate, rather than leaving it to private contractual agreements between aggregators and participating forest owners to handle. The guidance provided in the draft proposal tends to ignore the likely realities of projects entering and leaving individual aggregates and establishes too rigid and simplistic a requirement. **(PFT)**

RESPONSE: See response to Public Comment # 46.

Accounts on the Reserve, Transfers and Sales of CRTs

58. Pg. 6 states, "Aggregators must maintain a Reserve account to which CRTs can be transferred from the accounts of participating forest owners, and from which CRTs can be transacted." We understand that the landowner will remain as the legal entity responsible for forest management, reversals and any other obligations or liabilities. Additionally, simply because the CRTs will be transacted from the Aggregator's account does not mean that the Aggregator will need to take ownership of the CRTs from the landowner. Explicit clarification of these points written into the guidelines would be helpful for a clear and consistent interpretation. **(AgRefresh)**

RESPONSE: All CRTs will need to be transferred and transacted out of the Aggregator's account. The timing, pricing, ownership and other details of the transfer of CRTs are up to the arrangement between the Forest Owner and the Aggregator. The requirement for the pass through the Aggregator account is to maintain the statistical integrity of the aggregate over time. In addition, this process provides transparency to the buyer/transferee of the source of the CRTs as well as affording all members of the aggregate the advantages of marketing offset credits at volume.

59. "Aggregators may also manage transaction of CRTs on behalf of Forest Owners using an aggregate account on the Reserve." It is unclear whether or not this is mandatory or optional, as it is an optional statement here, but a mandatory statement under Qualifications and Role of Aggregator. We feel this should be optional. **(SBC)**

RESPONSE: The pass through the Aggregator account is mandatory. See response to Public Comment # 58. The language throughout the aggregation guidelines will be

edited for clarification and consistency.

60. We would like more specific guidance on the roles of the aggregator. It should not be required of the aggregator to act as the “credit agent”. The scope of services should be up to the owners and the aggregator. If each owner must host an account on the registry, pays registry fees, and signs the PIA, they should have the right to broker their own credits. This applies even more so when each property contributes a different amount of offsets under a different project type. This creates enormous risk to each landowner, and we feel many will hesitate to enter into such an agreement regarding the rights to the transfer of their carbon credits. **(SBC)**

RESPONSE: Edits have been made to the guidelines to provide more specific guidance on the role of Aggregator. See response to Public Comment # 58 on the transfer requirements to the Aggregator account.

61. If each of the projects within an aggregate are required to pay the \$500 account maintenance fee, even in the many years where there is no account activity, this would become prohibitive over the 100 year life of the project. A more workable arrangement would be for only the aggregate account holder to pay the fee, since it is through this aggregate account that all project maintenance activities will be taking place. The fee amount could also be scaled according to total aggregate area. **(BBW&A, Arcata, SBC)**

RESPONSE: The goal of the aggregation guidelines is to enable economies of scale for the small landowner participant through reduced inventory, verification and project management costs. During the time the aggregation guidelines are implemented, the account set up and maintenance fee will be maintained for all Forest Owner participants with either standalone or aggregated projects on the Reserve. However, the Reserve will continue to review the impacts of this fee for all projects particularly in the years where there is no account activity.

62. We suggest that CAR consider a reduced annual fee for landowners with accounts enrolled in an aggregate. The aggregator should significantly reduce costs for CAR – creating homogenous and streamlined document submissions, responding to many landowner questions, etc – and it would be reasonable to offer a reduced annual account fee to small forest owners who are enrolled in an aggregate due to the reduced expected cost. **(New Forests, NCRM)**

RESPONSE: See response to Public Comment # 61.

63. To improve flexibility and landowner comfort with joining an aggregate, individual projects should maintain the ability to transact CRTs out of their own account. **(Blue Source, NCRM)**

RESPONSE: See response to Public Comment # 58.

64. As described, we do not see any significant issues. **(CarbonVerde, NNRG)**

RESPONSE: Noted.

65. Establishing a mechanism for pooling credits within an aggregate account without paying transfer fees between aggregation members and the larger aggregate account will be an important component of achieving economies of scale. **(Arcata, RRI)**

RESPONSE: Noted.

66. Key question is who should have title of the CRTs and hence the ability to sell them. The aggregator should take title contractually and then either re-allocate CRTs or proceeds from CRT sales to project participants. **(EM)**

RESPONSE: See response to Public Comment # 58. The arrangements between Forest Owners and Aggregators for timing and distribution of proceeds are expected to vary based on specific situations and goals of the Forest Owner.

67. If the aggregated group of participants is collectively addressed as the “project” and the Aggregator is charged with handling all transactions, then individual participant accounts seem redundant and unnecessarily costly. We would like to propose that the forms and documentation for participants in the aggregate pool be submitted by the Aggregator for inclusion and reporting in one CAR aggregate account. This change will remove or reduce the initial \$500.00 fee for each participant in the program. **(Finite Carbon)**

RESPONSE: An aggregation is a group of projects submitted by participating Forest Owners. An aggregate is different than a project and it would be misleading for the aggregate to be addressed as a “project.” Some significant differences among participating projects in an aggregate may include type, geography, start date, and baseline. See response to Public Comment # 31 for further discussion.

68. This arrangement seems feasible, but CAR should require evidence of approval by each project owner for any transfers from the underlying project account to the Aggregator account. While the private contract terms will vary between each Aggregator and its participating Forest Owners, CAR should require that such a contract stipulate contingencies in the case of the demise of the Aggregator. Further, we recommend that the Reserve establish a procedure in this situation wherein the Forest Owners within an aggregate be allowed a timeframe, say up to a year, in which they may select a permanent replacement Aggregator while account activity is temporarily suspended under no penalties. **(PFT)**

RESPONSE: Transfers from a participant project account to an Aggregator account will not be able to occur without Forest Owner approval. See response to Public Comments #33 on contingencies in the case of a termination of the contract between the Forest Owner and the Aggregator and the time for a Forest Owner to select a replacement Aggregator.

Inventory Standards for Participating Projects

69. The approach taken appears to be statistically valid and will reduce in-field inventory costs while maintaining the aggregate sampling error at CAR’s required level. We do not believe these standards should present obstacles for smaller landowners. **(CarbonVerde, Ecotrust, ESI, NNRG)**

RESPONSE: Noted.

70. The statistical requirements in the aggregation protocol are favorable to small landowners, and will decrease the barriers to implementation by decreasing the number of plots required. The City of Arcata finds that the Reserve has accomplished this in a manner that does not compromise the integrity of the forest protocols. **(Arcata)**

RESPONSE: Noted.

71. We have no feedback on the approach at this time but we recommend that CAR assure thorough review by biometricians competent to provide such critique prior to consideration of the adoption of these Guidelines. **(PFT)**

RESPONSE: The proposed methodology was prepared with the assistance and review of two forest biometrician experts.

72. We acknowledge the potential savings of the reduced intensity inventory design suggested by the protocol. However, it appears that this savings is most pronounced in localized aggregate pools of participants. As aggregate pools become larger and more geographically diverse, each participant or group of participants will need to have a statistically sound inventory to compare to various CAR assessment region baselines. Therefore the proposed inventory design will favor only localized aggregate pools and discourage regional or national solutions. In addition, the act of aggregation places a fiduciary responsibility on the aggregator to compensate and monitor participants equitably within the pool. It is this equity that requires that individual projects maintain a quality inventory of similar style and scope. While the current inventory approach is of value in many instances, Finite Carbon would also support the development of alternative or complimentary procedures that would not penalize larger aggregate pools such as per participant inventory statistical targets. **(Finite Carbon)**

RESPONSE: The proposed inventory guidelines are expected to provide savings for all pools of participants without bias for any particular localized groupings. The benefit of the aggregate is the sliding scale for the target sampling error (TSE) based on the number of participants, regardless of size or geographic location. The TSE is then used in the design of the inventory for all of the individual participants in the aggregate. In order to maintain a similar scope of inventory for each individual project, the number of plots required for the full inventory on each project is determined by using an estimate of the mean and standard deviation for the specific project site, the required confidence level and the TSE for the aggregate. This is the operating concept behind the proposal. As these aggregation guidelines are being implemented and a greater body of experience with the guidelines has developed, the Reserve will be open to reviewing alternative procedures, particularly if any type or size of aggregate pool is disadvantaged by the proposed methodology.

73. The Reserve should provide more guidance regarding appropriate methods for calculating sampling error, even if simply providing references that may be good sources for forest owners to use. Although the statistical standards used for conventional timber inventories serve their purpose adequately, the statistical methods—and proof of their proper application—required for forest carbon inventories has been a significant focus of verification activities, likely due to the fact that the commodities being transacted are based on estimated stocks rather than easily measured units, such as cubic feet of wood fiber or the simple weight of a log. Thus, the more guidance the Reserve is able to provide on the matter, the better prepared forest owners—

especially the small forestland owners that are likely to comprise the projects enrolling in aggregates—will be when it comes time to register their stocks and CRTs. **(PFT)**

RESPONSE: Due to the potential variety in statistical methods, it is the responsibility of the Forest Owner to design an inventory methodology for their specific project site to cover the sampling requirements. Appropriate suggested references will be added to the Reserve web site over time as projects move forward with verification.

Monitoring and Verification

74. The statement that the aggregator is responsible for selecting a single verifier for all enrolled projects needs to be clarified in several respects. First, since not all enrolled projects are audited in each year, it is unclear whether this requirement means that the aggregator selects a verifier for all projects being audited during a given year or to audit all participating projects during a more significant portion of the verification cycle (e.g., six years). Second, the statement is not entirely inconsistent with the previous statement regarding the role of the aggregator described on p. 4 of the draft proposal, which says aggregators may assist in facilitating verification activities on behalf of the Forest Owner. Stating that aggregators are required to select a single verifier, which is an important component of facilitating verification activities, is different than saying they have the option of facilitating verification activities. **(PFT)**

RESPONSE: The intent of the guidelines is to require the Aggregator to select a single verifier for all enrolled projects in any given year or set of years up to six consecutive years (the number of consecutive years allowed is from Climate Action Reserve Verification Program Manual June 17, 2009; Section 2.6). The language throughout the aggregation guidelines will be edited for clarification and consistency in regards to the obligations of the Aggregator with verification of participating projects.

75. The burden of verifying three separate parcels on three separate baselines is still potentially cost prohibitive. Under the current verification protocol, there is a minimum of 4 check plots per project. The remaining number of check plots is determined through a calculation based on a number of factors. Under this policy, a project of 300 acres would potentially have the same number of check plots required as a project of 100 acres. However, if each of the 100 acre parcels is submitted as separate projects, the result is 12 check plots required for verification. This effectively triples the cost of verification while doing nothing to increase the rigor of the project. We suggest that in this example, the three separate parcels with three separate baselines be allowed to unify into one “project.” **(Arcata)**

RESPONSE: Separate projects with separate baselines and/or starting dates cannot be combined into one project. This is because the project baseline is determined at the time of project initiation over a Forest Project’s entire crediting period (100+ years) and is not modified thereafter. Multiple baselines or multiple start dates would introduce the need for mechanisms to adjust and allocate baselines over time. In order to be fair to all participants, these would need to cover a wide range of potential scenarios and raises an unacceptable level of complexity to the administration and verification of projects. If the Forest Owner wants all the of the forest properties to be included in one project, a single baseline must be calculated and a single start date must be chosen that reflects a date after the last piece of property had been acquired and activity on that property has been

initiated.

76. A random approach to auditing of the annual monitoring seems appropriate. **(Arcata)**

RESPONSE: Noted.

77. The second paragraph in this section, which discusses on-site verification scheduling, also raises some concerns. If on-site verifications can be distributed through the six-year interval, the verifier should randomly select half of the projects for on-site verification not in year six, but simply prior to the first project verification within an aggregate (i.e., by year 6). All projects selected at that point would undergo on-site verification prior to year 6, whereas the remaining half of the projects would undergo on-site verification prior to year 12.

Furthermore, it is unclear what is meant by the final statement that on-site verifications may be “spread out randomly” during each six-year interval. Does this refer to the exact date of each verification, the order in which projects are verified, or the year in which each selected project is verified?

Regardless, we do not fully understand the requirement that site visits be random. It seems as though requiring random ordering and timing of site visits could prevent potential cost savings. For example, an aggregate with geographic clusters of projects could benefit by having projects within each cluster verified at the same time, thus limiting verifier travel expenses and perhaps allowing the simultaneous review of projects. Unless this requirement can be more adequately justified, the Reserve should consider modifying it to allow reasonable flexibility or eliminating it all together. **(PFT)**

RESPONSE: The intent is to require a percent of projects in the aggregate with on-site verifications within a 6-year and 12-year timeframe while maintaining a degree of randomness as an incentive for each participant to maintain inventory quality in the interim years. The language in the guidelines has been edited to address issues raised in the public comments as follows:

“On-site verifications must be conducted on a schedule such that at all times a minimum of 50% of the projects in the aggregate (rounding up in the case of an uneven number of projects) have successfully completed a site verification within the previous six years, and that 100% of the projects have successfully completed a site verification within the previous twelve years. These verification requirements are mandatory regardless of the mix of entry dates represented by the group of projects in the aggregate. The initial site verification required for entry into the aggregate may count to meet these site verification obligations.

On six year intervals, beginning with first year of the existence of the aggregate, the verifier must select from the total group of projects which projects will have scheduled site-visit verifications in order to meet these obligations. The process should utilize random selection to the degree possible and still meet the six and twelve year completion requirements. For example, in the case where there are ten projects that joined the aggregate in the first year, five of those projects should be chosen randomly to have on-site verification sometime before the seventh year. The on-site verifications may be spread out through each six year

interval or scheduled in a more concentrated manner that economizes on verifier travel expenses.

The only exception is when a second on-site verification for a Reforestation Project is deferred for more than six years (see the specifications of FPP, Section 6.1.1). In this case, the calculation of the percentages to meet the 6-year and 12-year minimums may be made without the deferred Reforestation Projects in the totals. After the second on-site verification for a Reforestation Project, this exception is no longer allowed.

78. The requirement to have a verification body pass a COI review against all enrolled Forest Owners might create an issue given the limited number of specialist resources. Since the Aggregator is the entity monitoring and managing the project, they should be the only entity subject to a COI review. **(EM)**

RESPONSE: The verifier will be verifying the individual project in an aggregate to confirm that it is operating under the aggregation guidelines and the FPP. The Aggregator is not subject to verification although may experience direct consequences of verification activities. Therefore, the Reserve will continue to require that verification bodies must pass a conflict-of-interest review against all enrolled Forest Owners and the Aggregator. The Reserve's Principles of Verification as listed in the Climate Action Reserve Verification Program Manual June 17, 2009; Section 1.6.1 are as follows:

“All verification bodies and verifiers conducting work under the Reserve uphold the basic verification principles laid out in ISO 14064-3:2006. Namely, verification bodies and verifiers shall demonstrate independence of the activity being verified (interpreted in detail in Section 2.5 under Conflict of Interest). Verification bodies must also demonstrate ethical conduct and fair presentation of its findings, conclusions and reports throughout the verification process. Finally, verification bodies must also show due professional care and have the necessary skills and competences to perform the verification.”

79. It would also be useful to clarify how this section relates to the Reserve's conflict of interest policy, specifically with respect to the requirement that a verifier relinquish its verification duties to another verifier after verifying a project for six consecutive years. Aggregates are obviously different since a single project is not necessarily verified in consecutive years. Nonetheless, it would be helpful to state whether a single verification body may conduct all verifications within a given aggregate during each six-year (or twelve-year?) verification cycle. **(PFT)**

RESPONSE: The Reserve's conflict of interest policy will remain consistent in the case of aggregates. Due to the random verification of annual monitoring reports in addition to site visits, the Aggregator will need to engage a different verification body after six consecutive years. The Reserve conflict of interest policy as related to this consecutive years of service reads as follows:

“...As an added protection, a verification body may provide verification services to a project for, at most, six consecutive years. If verification activities for more than 10 projects per year with the same project developer have been performed, it is likely that the Reserve may require further information to inform its determination, impose restrictions or require that another verification body is

selected. After a six-year period, the Reserve project developer must engage a different verification body to verify a project. The original verification body may provide verification services to that project developer after a lapse of a minimum of three years. This three year period begins with any lapse in providing annual verification services to a Reserve project developer.” (Climate Action Reserve Verification Program Manual June 17, 2009; Section 2.6)

80. If a landowner leaves an aggregate and another joins, we suggest CAR allow the aggregator to be an interim verifier and not require an immediate, on-site verification by a third-party but require an annual monitoring report that may or may not get verified. We see that requiring an immediate, third-party verification could significantly increase the costs and penalize the entire group. The annual monitoring reports and the verification process are likely to be what makes or breaks the economic viability of aggregation projects. **(Ecotrust)**

RESPONSE: Verification is a formal process and an Aggregator cannot provide verification of a project because in order for a verification to be credible, verifiers need to demonstrate independence of the activity being verified.

The initial on-site verification is critical for each new project because this verifies the baseline which will remain in place for the life of the project. In addition, the purpose for each project participant to undergo a third-party on-site verification (whether initial or subsequent to an initial verification) at the time of entry into an aggregate is to confirm that the project is in conformance with the FPP and the rules for inventory accuracy in the specific aggregate are met. This is an important provision for the protection of the other participants in the aggregate and for the integrity of the aggregate system as a whole. An example of when this requirement is particularly critical is when a project is moved from one aggregate to another and the two aggregates have different sampling error targets.

81. The most recent on-site verification should be sufficient for entering an aggregate. Under the Protocol and the PIA, CAR will have been appraised of any intentional or unintentional reversals since the most recent site verification. Projects that join an aggregate should be required to undergo site verification at the next batch of site verifications for the aggregate, but they should not be required to have a site verification immediately prior to entering an aggregate if they have had a site verification within the last five years. **(New Forests)**

RESPONSE: See response to Public Comment # 80.

82. A Project should not trigger a new field verification when it enters or leaves an aggregate, it should only have to recalculate its inventory confidence deduction going forward. Verification should be required in cases where a Project leaves an aggregate and wishes to become a stand-alone project, and it has not been field verified within the last six years, or a pre-existing Project wishes to join an aggregate but is due for a field verification on a six-year schedule. **(NCRM)**

RESPONSE: See response to Public Comment # 80.

83. It may be advisable to notify Forest Owners of an on-site verification prior to the year in which verification is to take place in order to allow adequate time for the Forest Owner to conduct

sampling of carbon stocks so as to ensure project stocks reported during verification are based on recent sampling rather than modeled/projected stock estimates. **(PFT)**

RESPONSE: As with standalone projects where Forest Owners can schedule their own project site visit verifications on a six-year interval, Forest Owners can be notified of an on-site verification prior to the year in which the verification is to take place.

84. ESI believes that the requirement to visit all properties within a 12-year cycle is problematic, since it functionally excludes the random verification opportunity – all projects should be subject to the potential for verification in every verification cycle. ESI also believes that a mandate of onsite-verification of 50% of the projects by year six is overly burdensome to the landowner/aggregator, and could be significantly reduced without sacrificing validity. ESI suggests that the requirement be restated that all properties must be onsite-verified by year 30, and that 25% of projects be verified every six years (sampling with replacement). This will reduce verification costs since it will reduce the frequency of onsite-verification, still allow for the identification of any projects found out of compliance early in the 100-year base PIA contract term, and retain the potential for any project to be onsite-verified during any verification cycle. **(ESI)**

RESPONSE: See response to Public Comment # 77. The percent of projects required for site verification within the 6-year and 12-year time frames are important provisions for the protection of the other participants in the aggregate and for the integrity of the aggregate system as a whole. As these aggregation guidelines are being implemented and a greater body of experience with the guidelines has developed, the Reserve will be open to reviewing alternative procedures where costs can be alleviated while at the same time ensuring that the reported emission reductions meet the Reserve's standards.

85. Under the Aggregation protocol, the project is the aggregated pool, with a requirement of 50% of the participants being verified on site every six years with all of the participants being visited within 12 years. If the project is considered at the aggregate level, the aggregation verification requirements are substantially more intensive than a standalone project of a similar size. Using this protocol, aggregated pool verifications would require the auditor to visit up to 50% of the property and sampling stands or strata across multiple participants' lands. In our view, in comparison to a standalone project, a site verification of an aggregated pool could be much more costly.

Also of concern are the requirements for verifiers to annually audit a sample of the monitoring reports. Stand alone projects are provided the latitude to have desk or interim verifications periodically if they choose within the 6 year site verification schedule. This difference also attributes higher annual costs and total verification costs to aggregated projects. We suggest that the CAR revisit this process for verification procedures in order to lower costs over the crediting period. **(Finite Carbon)**

RESPONSE: See responses to Public Comment # 84. Although interim desk verifications are not an annual obligation for standalone projects, the desk review of annual monitoring reports by an ISO-accredited and Reserve approved verification body is required if CRTs will be issued from the project.

86. Clarification should be provided for cases where an aggregate comprises an odd number of projects. Thus, when the total number of projects within an aggregate is odd, the number of

projects required to undergo on-site verification during the first six-year interval is half of the total number, rounded up to the nearest integer. The remaining projects would then undergo on-site verification during the second six-year interval. For example, an aggregation made up of 9 projects would have 5 projects undergo on-site verification by year 6, whereas the remaining 4 projects would undergo on-site verification during the second six-year interval. **(PFT)**

RESPONSE: See response to Public Comment # 77.

87. We would like further definitions on the consequences of a participating project that does not complete a successful verification. If all projects are affected and suspended because of one projects inability to pass verification, again we are presenting great risk that will keep landowners from participating. **(SBC, PFT)**

RESPONSE: The aggregate must maintain a necessary verification status, in any given year, of the following:

- **A minimum of 50% of the projects in the aggregate (rounding up to a whole number in the case of an uneven number of projects) have successfully completed a site verification within the previous six years, and that 100% of the projects have successfully completed a site verification within the previous twelve years. (See response to Public Comment # 77)**
- **A successful number of annual verification of annual monitoring reports equivalent to the square root of the total number of participating projects in the aggregate, or the total number of participating projects divided by 12, whichever is higher (when rounded to the next highest whole number).**

A project in an aggregate may experience an unsuccessful verification. In this case, a verifier can verify additional participating projects until the total successful verifications reach the number required to maintain verification status for that year (as described above).

If the required number of successful verifications has not been achieved 12 months after the date the verification body submits the first negative Verification Opinion and Report to the Reserve of a project in the aggregate, crediting of the participant projects in the aggregate will be suspended until the required number of successful verifications has been achieved and the necessary verification status of the aggregate has been restored.

The Reserve will not issue CRTs for a project in an aggregate that experiences any kind of a negative verification. If the specific issues involved in the negative verification of a project are not resolved and that project is not verified within 24 months of the negative Verification Opinion, the aggregate will need to terminate that participating project or crediting of the participant projects in the aggregate will be suspended until the project has received a successful verification.

88. The second to last sentence of the third paragraph should be changed to state, "Each year, projects to be audited must be selected randomly, and Forest Owners will not know when their annual monitoring reports will require verification." This makes it clear that the random selection occurs every year, in contrast to the random selection process for on-site verification, which presumably occurs once per twelve-year cycle. **(PFT)**

RESPONSE: Agreed. Suggested edits will be made for clarification.

89. This section also is lacking an outline of the process for projects that do not have their annual monitoring report verified in a given year. Although they are not audited, is there some form of a modified desk review conducted by the verifier or the Reserve in order to ensure there are no unusual results reported, such as a significant and unforeseen spike in CRTs? A process should be provided here to indicate how non-verified annual monitoring reports would be accepted and posted. **(PFT)**

RESPONSE: Annual monitoring reports will be posted on the Reserve web site at the Forest Owner's project account and referenced at the Aggregator's account. The current process does not include review of this report for projects which are not randomly chosen per the aggregation guidelines even when the annual monitoring report results in the issuance of CRTs. However, a subsequent desk verification or site verification may determine previous monitoring reports, not subject to review, resulted in overestimated onsite carbon stocks. Any resulting downward adjustments will be treated as a reversal and the Forest Owner must retire CRTs in accordance for compensating for a reversal (FPP, Section 7).

90. The last paragraph in this section needs to be expanded in order to provide guidance for what happens if the total number of successful verifications satisfies the audit requirement for a given year, but a verification issue is not resolved for a project that triggered an additional project to be verified. The language proposed here suggests that CRTs could still be issued in this situation. [See public comment submission for more detail.] **(PFT)**

RESPONSE: See response to Public Comment # 87.

91. The timeframe in which verification issues must be resolved (as referenced in the last sentence of the last paragraph) needs to be clarified. It is stated that resolution must be attained within twelve months. However, there is no specific indication of when that timeframe begins. Presumably, resolution must be achieved within twelve months after the verification issue(s) are identified and documented, but this section should clearly state this. **(PFT)**

RESPONSE: See response to Public Comment # 87.