

Draft Final Expanded Site Inspection Report - Community Comments

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1	Comment Resolution Matrix					
2	Date:					
3	Item	Source	Type	Page	Section/Paragr	Question/Comment
4	1	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			The CERCLA process is taking us along a path of investigations and learning. I see our role in that process as one where we get to ask the difficult technical and political questions along the way.
5	2	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			What is our goal? Is part of our goal to incorporate our feedback into the Remedial Investigation phase of the CERCLA process? How will we know if we are getting there? I see that we are getting some of our questions answered and communication is happening between government agencies. There is also the small gesture of putting the units of measure chart in the executive summary.
6	3	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			If you want to read this document, I suggest reading it from the back to the front. That will develop context for all the confusing explanation of the things in the front.
7	4	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			There is a MAGIC NUMBER referred to in the document. It is SL or screening level. This is the proverbial line in the sand where the government seems to make decisions.
8	5	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		Fig. 5	There is no list of sinks, sources, or pathways to use to conceptualize the storage and movement of the pollutants through our drinking water system. Where does it go? Where did it come from? The baseline stormwater flow is due to ground water, Figure 5. The pore water concentrations are high. The commercial side of the airport experienced a chemical release that displaced PFOS/PFOA in the sediment. What chemical does that?
9	6	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		6.1.6, 6.2.3	I didn't find all source contributions per day described to make judgements about how to prioritize locations. They clearly state ground water (6.1.6) and sediment (6.2.3) sink/source for Recreation Pond. Why don't they provide a similar calculation for Lake Washington?
10	7	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		4.3.4.1, Figure 9, Figure 10	Why is there an implied recommendation right in the executive summary to ignore the contributing pathway of ground water to Lake Washington when in the report section 4.3.4.1 the model assumes ground water (part of the water column) is a significant transporter? And, ground water flows (Figure 9) from the east edge of the base (high levels of pollution) to the monitoring well next to the lake (lower concentration, Figure 10).
11	8	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		5	What relationship does the criteria for a potential release location (PRL), section 5.0, have with known pathways in which the pollution travels?
12	9	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			How do you define significance? There are implied judgements about significance throughout the document. Conservative assumptions are ok when dealing with uncertainty of data. Liberally excluding pathways is not.
13	10	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			Individual contributions to Lake Washington below the MAGIC NUMBER (SL) are not insignificant contributors. The summation of pathways to our water supply over time and the storage locations are what matter. Our lake has become the storage point for the pollution, similarly to Recreation Pond becoming a rest-stop along the way. A potential release location criterion is not the same as a transportation pathway to a surface reservoir or subterranean reservoir.
14	11	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		4.3.4, 6.2.3, 6.4.3	Does sediment contribute to the detection levels? The report claims both yes and no, section 4.3.4 no, sections 6.2.3 and 6.4.3 yes.
15	12	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		6.2.3.3	Discussion talks about conditions that would invalidate their model.
16	13	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		6.3.2	Is the model really calibrated when the deviation is 30 % for a rain event?
17	14	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		3.1	Would it be useful to research the reputations on the laboratories that were used?
18	15	RAC Member John Clarke	Expanded Site Inspection (ESI) Report		3.12	What were the results of comparing the duplicate samples for quality assurance?
19	16	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			Failing early is good in entrepreneurial endeavors, but it is only useful if one quickly applies the learning from it.
20	17	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			If different techniques and technologies were used to learn more about apparatus set-up for the RI, it should be plainly stated as such. Several places judgement statements are made based on results of trails. Judgements should be held off for as long as possible while learning about the situation.
21	18	RAC Member John Clarke	Expanded Site Inspection (ESI) Report			Actions and statements at this time should be focused on understanding and communicating the situation. Understanding an issue as complicated as this is not an easy task.
22	19	RAC Organization members Newburgh Clean Water Project, Quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.8		We know that on-base groundwater at various depths is contaminated with PFAS, and that off-base groundwater has been impacted as well. To the extent that PFAS emanating from SANGB is impacting groundwater in and around the Base, it should be assumed that PFAS is in turn polluting Washington Lake. It is ANG's burden to explain how the conclusion that PFAS is not impacting Washington Lake is plausible given these hydrological characteristics, which it has not met in the Draft Expanded SI Report. The potential that a groundwater plume is migrating to and continues to pollute Washington Lake is still very much plausible.

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23		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p. 8-9		Evidence collected to date by ANG and others clearly shows the existence of a groundwater pathway for PFAS contamination to Recreation Pond and ultimately, Washington Lake. This plainly suggests that PFAS-contaminated groundwater is migrating from Recreation Pond in the direction of Washington Lake. The ANG must collaborate with state and local stakeholders in developing a methodology to fully characterize the nature and extent of PFAS contamination emanating from the Base through groundwater as part of the next phase.
24		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.9.	paragraph 2	ANG must revise its numerous conclusions downplaying the role of groundwater as a potential conduit for PFAS contamination due to lack of data to substantiate these claims.
25		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.9.	para 2	The statement that "PFAS were not detected in groundwater at elevated levels across the entire SANGB but isolated to distinct areas" should also be clarified or contextualized, since Figure 10 shows that almost all of the groundwater wells downgradient from known and suspected PFAS discharges show exceedances of the ANG's inflated SLs
26		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.9.	para 3	There also appear to be several misleading and/or incorrect conclusions related to off-Base groundwater impacts. The March 2019 Final Site Inspection Report Addendum shows significant levels of PFOA and PFOS for nearly all groundwater wells, including one result exceeding the 40 ppt SL for PFOA and PFOS used in the Draft Expanded SI Report, and another result just shy of that level. The statement about Washington Lake wells must be deleted, and all conclusions regarding off-Base groundwater impacts must be revised to reflect the uncertainty in the current data.
27		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	bottom, p. 9		Groundwater from SANGB is Clearly Contributing to PFAS Discharges to Recreation Pond through the Storm Drain System. Text follows in the comment letter to substantiate this claim.
28		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.10,	para 2	There has been no attempt to delineate or characterize the groundwater contamination that is impacting the storm drain system. Without this data, DEC's hypothesis that "the storm sewer system at [SANGB] is intercepting a plume or plumes of groundwater resulting from past releases of [PFAS-containing firefighting foam]" is very much still plausible. Additional investigation into this potential model of contamination is warranted.
29		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.10,	paragraphs 3 and 4	Moreover, this groundwater infiltration is in turn impacting downstream discharges. The contamination is conveyed to Recreation Pond and ultimately discharged via Outfall 010, which has extremely high levels of PFAS. From there, the contamination enters a tributary of Silver Stream. Silver Stream, when not diverted to contribute to Washington Lake, flows into the Moodna Creek, a tributary of the Hudson River. People are advised against eating any fish caught in these waters - Recreation Pond, Silver Stream, Washington Lake or Moodna Creek - due to this contamination. As DEC noted back in 2016: <i>The pattern of PFOS detections in the outfall samples during high and low flow conditions, and in the inlet and outlet samples of the 17K storm sewer pipe suggests that the on-site drainage system is intercepting a PFOS groundwater plume(s) below the water table and discharging it to the ANG Base retention pond. PFOS may have been released to the soil and groundwater during historic AFFF spills and other discharges which are known to have occurred at the site.</i>
30		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.10-11		The ANG seeks to rule out this (groundwater) model of contamination by suggesting that "subsurface materials do not present a ready pathway for a groundwater plume." Again, this conclusion is not supported by evidence in the record. As DEC and others have pointed out, there has been no attempt to evaluate subsurface characteristics across the site, rendering any conclusion about this potential pathway premature at best. Clearly, groundwater is flowing into the storm drain and has migrated off-Base. Fractured shale bedrock at SANGB will remain an important potential migration pathway for polluted groundwater until we have data to rule this out. Data as to the subsurface characteristics throughout the Base needs to be part of any subsequent investigation.
31		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.11		Based on the above, it appears that a groundwater plume at SANGB may well be impacting Washington Lake through direct migration and/or through the storm drain system. The ANG's attempt to eliminate this model is simply not justified. Rather than abandoning this line of inquiry, the ANG must continue to investigate groundwater infiltration of the storm drain system. Another round of testing to examine groundwater adjacent to the pipes should be part of the next phase of the investigation.
32		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.11	paragraph 3	The Pattern of Wet and Dry Weather Sampling Suggests that Groundwater Intrusion, not Surface WaterFlow, May be the Primary Mechanism of Contamination to Washington Lake

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33		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.11	para 4	As stated above, dry weather flows in the storm drain system show extremely high PFAS concentrations, with one sample measuring over 4,000 ppt of PFOA and PFOS combined. There are several catch basins where these dry weather discharges exceed wet weather ones. Yet the Draft Expanded SI Report underplays the clear significance of groundwater in concluding that "[s]tormwater to surface water flow is the primary mechanism for PFAS to" Washington Lake. Such a conclusion, especially without any attempt to explain the extremely high levels of PFAS discharges during dry weather, is unsupported by data in the record established to date.
34		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.11	para 5	A more appropriate reading of the data would support the inference that, for at least some catch basins, the pattern of dry and weather sampling suggests that groundwater intrusion into the storm drain is in fact the primary mechanism for PFAS contamination, as DEC proposed four years ago. This groundwater contribution to Recreation Pond is a base load, and stormwater adds to this contamination - not the other way around. The magnitude of the additional stormwater loading varies by outfall, but even in the absence of that loading groundwater would serve to contaminate Washington Lake from Recreation Pond.
35		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p. 11	para 6	Unless the ANG can affirmatively support the conclusion that groundwater is not the primary pathway, the conclusion that stormwater to surface water is the primary mechanism must be removed from the Expanded SI Report. The next phase must include additional investigation to determine the relationship between groundwater and surface water flows.
36		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.11	para 7	<u>In sum, the data does not support the conclusion that a groundwater plume is not impacting Washington Lake. This statement needs to be removed from the Expanded SI Report and the ANG must work with local and state partners to ensure that groundwater contamination is fully delineated in the next phase of the investigation.</u>
37		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p. 11	para 8	Exfiltration and Hydraulic Connectivity at SANGB must be Understood to Inform Next Steps.
38		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p. 12	para 1	Work performed during the Expanded SI raised the possibility of exfiltration from the storm drain system to groundwater. To understand the flow of PFAS contamination at and beyond SANGB, we need to understand the dynamics of this pathway. Without this information it will be impossible to know whether exfiltration is a source of PFAS to groundwater. Given what we know about the deteriorated condition of the storm sewers, the ANG must study the impact of exfiltration to groundwater from the pipes at the same time it studies the impact of infiltration to the pipes. The nature of this relationship will impact the volume of water ultimately conveyed to Recreation Pond and beyond, which is crucial to our understanding of the flow of PFAS contamination to off-base receptors. This investigation should be conducted as part of a broader effort to understand the connectivity between groundwater, stormwater, and surface water.
39		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.12	paras-2-5	<i>Conclusions Are Often Based on Too-Limited Data, Including Single Samples in Some Cases-In three instances, sweeping conclusions appear to be drawn based at least in part on single samples: To "Evaluate Surface Water and Groundwater PFAS Contributions to and from Recreation Pond," a single sample was collected from a single new monitoring well; To "Evaluate Surface water and Groundwater PFAS Contributions to Lake Washington," a single sample was collected from a single new monitoring well, in addition to existing monitoring wells, many of which showed extensive evidence of contamination; To "Evaluate Soil and GW Quality at Potential Release Location (PRL) 16," a single sample was collected from a single new monitoring well. In addition, at least three existing monitoring wells, MW-10, MW-12, and MW-15, could not be sampled because they were dry at the time of sampling.</i> <i>In each case, the paucity of data undermines ANG's attempts to make sweeping conclusions that will impact the future of the remediation at SANGB. Clearly, any conclusions based on individual samples are unjustified and must be deleted. In general, where existing data is limited, ANG must refrain from drawing conclusions and instead flag those data categories that need to be supplemented in future investigations.</i>
40		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.12	para 6	Landfill-area Contamination Must Be Further Studied and Remediated. Testing data for both ground and surface water in the vicinity of the landfill show SL exceedances, including measurements as high as 1,220 and 1,830 ppt combined PFOA and PFOS, more than 100 times greater than the proposed New York State MCLs. The landfill is a source of off-base contamination, and a potential pathway of contamination exists to Washington Lake via groundwater and/or Patton Brook, and private drinking water wells via groundwater. All sources of PFAS contributing to pathways of contamination affecting identified receptors must be addressed, including the landfill area. There is sufficient evidence to identify the landfill area as a confirmed release location of PFAS because SLs are exceeded in several sample results.

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41		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.13	paragraphs 2-3	<i>All Receptors Must be Considered to Assess Potential Groundwater Pathways</i> ; Finally, as previously stated, because all receptors have not been considered, significant potential groundwater pathways must be studied to understand the PFAS pollution at SANGB's impact on Browns Pond, and private and public wells, including the Town of New Windsor's Kroll and Butterhill wells.
42		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.13	paras 4-8	Options to Adequately Treat Stormwater at Recreation Pond Must be Further Studied. Filtering contaminated Recreation Pond water prior to its discharge to a tributary of Silver Stream has been recognized since 2016 as a critical interim step in protection of public health and the environment from the PFAS contamination at SANGB. The conclusions in the Draft Expanded SI Report that the volume of stormwater "discharging from Recreation Pond likely exceeds the ability to treat it all using conventional filtration media" and that "Recreation Pond will likely require a treatment capacity so large, that it may not be feasible given the observed site conditions" are premature given the status of remediation and unsupported by the evidence presented. Numerous steps could be taken to minimize reliance on the filter at Recreation Pond, none of which have been implemented to date. Strategies that can address capacity concerns include, but are not necessarily limited to: reducing the flow of groundwater infiltrating SANGB storm sewers, via slip-lining or other methods, which would also have the result of reducing PFAS loading to Recreation Pond; reducing stormwater volumes, by re-routing some or all of the existing storm sewers that discharge to Recreation Pond, such as those originating from Route 17K and Stewart International Airport; and expanding stormwater storage capacity of Recreation Pond or building new storage capacity. These and/or other strategies must be considered comprehensively as treatment systems are designed and implemented to meet the long-stated and still-essential goal of eliminating PFAS-contaminated discharges from Recreation Pond.
43		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.13	para 9	Further, in addressing these questions of capacity, it is imperative that future studies consider realistic storm scenarios. While the source of information used for analysis is the most currently up-to-date (National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 10, Version 3), analysis of stormwater-related pollution and treatment should consider future scenarios, as overall precipitation volumes are predicted to increase, with "more frequent storm events and heavier downpours." Reliance on the historical record alone is insufficient, given the magnitude of projected changes to come.
44		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.14	paras 2-4	Contaminated Recreation Pond Sediment Must Be Remediated. One of the conclusions in the Draft Expanded SI Report is that, "[s]ediment in Recreation Pond likely contributes PFOS and PFOA to the surface water, however, the potential contribution from sediment is relatively low compared to contributions from stormwater and surface water." One of the models estimated combined PFOA and PFOS contribution from sediment as high as 20 grams per day. Minimizing the importance of this pathway does not serve the goal of ensuring that the community's drinking water is safe to consume. All sources of PFAS contributing to Recreation Pond and downstream water contamination must be addressed, including sediment contamination. The reduction or elimination in groundwater- and stormwater- associated PFAS loading should be assumed, and the sediment-associated loading addressed as part of a comprehensive remediation. Moreover, given that preliminary results indicate that sediment may be an important source of PFAS contamination, the model should be refined to improve the accuracy of future results and to minimize reliance on assumptions. This will serve to increase our understanding of sediment-to-water flux and the potential magnitude of this pathway.
45		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p. 14	paras 5-8	Investigations of Soil Contamination are Insufficient. The Draft Expanded SI Report details only 10 soil samples from three locations, which is insufficient to characterize the extent of the PFAS soils contamination for a Base that spans approximately 267 acres. The available testing data reveals that PFAS concentrations on the Base are highest in soils. PFAS have an affinity for and are highly mobile in water. Rainwater will mobilize PFAS in contaminated soil, resulting in: PFAS-polluted stormwater that flows through the stormwater system to discharge to Recreation Pond and beyond, and/or PFAS-polluted groundwater, which infiltrates stormwater system to discharge to Recreation Pond and beyond, and/or PFAS-polluted groundwater that flows off-base to receptors that may include Washington Lake, Browns Pond, Kroll Well, Butterhill Wells, private wells or other receptors. The soil on the base holds the greatest volume of PFAS. This is the likely source of the PFAS in stormwater. Without addressing the massive volume of PFAS in the soil, PFAS will mobilize with every rain or snowmelt event and continue to contaminate the environment and impact human health.
46		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.14-15		Stormwater modeling. The Draft Expanded SI Report describes plan deviations indicating that only one or two storms were used to inform models that will be critical in understanding the flow of pollutants into and through Recreation Pond. We are concerned that too few storm events were measured to properly calibrate, as evidenced by the fact that modeling results varied quite substantially from observed values. As ANG acknowledges, further data inputs and refinement is necessary

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47		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.15	para 2	Stormwater monitoring. The Draft Expanded SI Report documents that stormwater monitoring stations collected flow measurements every 15 minutes. Such limited measurements provides insufficient resolution for measuring flashy responses to rain in a stormwater system, particularly one with as much impervious pavement as the SANGB. It is certainly feasible to record measurements at shorter intervals, even as low as once a minute. Given the unreliability of the modeling results presented in the Draft Expanded SI Report, ANG must correct this issue.
48		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.15	para 3	In several places, the report describes "significant" or "not significant" contributions of PFAS. Science increasingly shows adverse health effects at PFAS levels below 1 ppt. Thus, we believe all PFAS discharges from the Base are significant, and particularly those that exceed anticipated New York State MCLs and Water Quality Standards and the much higher SLs. While we recognize that <u>priority actions need to be identified based on the magnitude of contamination affecting drinking</u>
49		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.15	para 4	Pore water sampling. ANG must incorporate pore water sampling in subsequent investigations. This data will serve to refine conceptual site model.
50		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.15	para 5	Retention basins. The presence of glycol – or rather, the lack thereof - was used to assess PFAS contributions from the retention basins. We ask for clarification and contextualization to help understand these results. In particular, the final Expanded SI Report should address the issue of whether glycol can be used as an indicator in other areas and whether there is a broader connection between glycol and PFAS? We agree that additional sampling is warranted and urge that this sampling be included in future investigations.
51		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.15	para 6	Groundwater impacts downgradient of SANGB. The Draft Expanded SI Report notes that five of the six PFAS sampled were detected at monitoring well SLMW-21S. Concentrations of PFOA and PFOS exceeded New York State's anticipated MCL and presumed Water Quality Standards, and the combination of PFOA and PFOS exceeded the ANG's SL. Monitoring at SLMW-21S was meant to "evaluate seasonal variations for PFAS in groundwater downgradient of [SANGB]," but the Draft Expanded SI Report does not offer any explanation for what the elevated PFAS levels mean for modeling groundwater from SANGB. The exceedances must be explained in the context of groundwater migration off-base in the final Report.
52		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p. 16	para 1	Groundwater sampling at former base landfill. Many of the 13 monitoring wells sampled in the vicinity of the former landfill showed exceedances of the SLs, with additional wells showing detections of PFAS. The next phase of investigation should, at a minimum, include offsite wells at similar depths to those with confirmed exceedances and detections.
53		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.16	para 2	Revisiting previous results. Numerous samples from earlier investigations, including the March 2019 Final Site Inspection Report Addendum, were below previous SLs but exceed the SL proposed by ANG here. These previous results need to be reassessed in the context of the more stringent SL, and all results should be periodically reassessed as the ANG adopts more health-protective SLs.
54		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.16	para 3	We believe the Department of Defense when it states publicly that "[e]nsuring the health and safety of our servicemembers, the families living on our installations, and the surrounding communities is one of our top priorities." Drawing the proper conclusions from the data collected for the Expanded SI and throughout the site inspection phase is a critical juncture for the future well-being of the Newburgh-area community. As the ANG notes, the data presented in Draft Expanded SI Report will be used to inform the process of "determining the most significant contributions of PFAS leaving the SANGB at Recreation Pond and ultimately impacting [Washington Lake]." This data will be used to "aid in developing [interim remedial measures] and establish [data quality objectives] for the [remedial investigation] phase." Using this data wisely will set the stage for a future cleanup that protects Washington Lake and other drinking water sources while allowing the regional ecosystem to rebound from decades of contamination. While we do not dispute the critical importance of remediating and preventing future contamination of Washington Lake, we must reiterate that other receptors, including public drinking water supplies and contaminated food sources, are also of concern.
55		RAC Organization members Newburgh Clean Water Project, quassaick Creek Watershed Alliance, and Riverkeeper	7/20/2020 Comments on Draft Final Expanded Site Inspection Report at Stewart Air National Guard Base	p.16	para 4	There is a distinct risk that the premature or incorrect inferences drawn in the Draft Expanded SI Report, if finalized, would narrow the scope of remediation at SANGB in ways that would be both counterfactual and unjust. The downside of that is nothing short of a perpetuation of a public health crisis. For all of us to get what we want out of this process, we must ensure that decisions are data-driven, and based on diligent good faith science in the interest of promoting public health and ecological health. Hastily ruling out plausible contamination pathways may expedite a cleanup, or make it less expensive, but it will not address the toxic legacy from the Air National Guard's use of PFAS at Stewart Air National Guard Base. We look forward to working with you in taking the next step to restoring the Washington Lake watershed, and other receptors affected by pollution sources at the Base.