Questions Received from Robert Nied, Moderator of the citizen-organized Lowell Lake Working Group

Topic: Ambiance or Aesthetics

1. How do you reconcile the significant gap between the quiet, natural state of Lowell Lake valued by the community and FPR's development plan?

Answer: FPR is committed to maintaining the quality of the experience at Lowell Lake State Park. The Master Planning process is being undertaken to identify ways to make improvements for both environmental and human benefit. Goals of the Master Planning Project include:

- The historical character, rustic nature and low-impact feel shall be retained and incorporated into all design elements
- Structures shall blend in with natural surroundings

FPR desires to balance the historic, rustic and low-impact character of the property while providing modern, functional and fully accessible facilities for the park visitor of today and the foreseeable future. We must provide better, more appropriate, deliberately designed and sustainable facilities for day users. Day use levels are approaching or may have already exceeded desired thresholds based on user satisfaction. Providing better and more appropriate facilities will not necessarily equate to increase visitation or noise levels. The character of the park is what makes it unique and is essential to maintain.

Topic: Infrastructure, Use and Lake Impacts

2. How is the development plan for Lowell Lake consistent with ANR's goal to "to protect and improve the health of Vermont's people and ecosystems" when an increase in usage in this small park may significantly tax the ecosystem?

Answer: Concept Plans are being designed with ANR, FPR and Vermont State Parks' missions as guiding principles. The scope of the options being considered are designed to lessen environmental impacts of visitors. Although increased use is not a programmatic goal of the planning project, there's no evidence to suggest that this would significantly tax the ecosystem. Our experience managing recreation on state lands indicates that better management of recreational use, even when increased, results in a better user experience and environmental protection. Recent examples of this may be seen at Alburgh Dunes State Park, Waterbury Reservoir, and Molly's Falls Pond.

The Concept plans are being reviewed for regulatory compliance by FPR, FW, DEC and NRB staff. Any proposed infrastructure would have to comply with environmental and regulatory

protections and applicable permits. There is no stated goal or desire to increase visitation in an unchecked manner. Depending on the outcome of feedback and viability of Concept plans, a final Master Plan will be formulated that factors in regulatory requirements that include environmental protections.

Of the 356 acres that comprises Lowell Lake State Park, the Master Plan is focused on less than half of the 12% classified as the Intensive Management Area. The overall scope of substantial changes in the Intensive Management Area amount to less than 10 acres of potential disturbance. The Intensive Management Area contains no rare, threatened or endangered species and no state-significant natural communities; it is all classified as upland forest.

Visitor use has increased since the original long range management plan was adopted; there's no disputing that. Since 2017, FPR has greatly increased the accuracy of attendance records kept at Lowell Lake State Park. When recordkeeping methods are factored in, the park attendance appears to be tracking on par with that of the overall park system –5-10% average annual increase. This increased use is currently difficult to manage due to unplanned legacy layout of roads and parking, lack of restroom facilities and other infrastructure and limited staff. Carefully planned infrastructure will direct users to areas designed to minimize human impacts on the natural environment. A team of ANR professionals have been reviewing draft plans to ensure protection and enhancement of water quality, wetlands, shoreland conditions, wildlife habitat, forest health and productivity as well as human enjoyment and safety in the state park. This level of review occurs in long range planning and the Annual Stewardship Plan review.

3. Has FPR developed a specific management plan focused on identifying, preserving and mitigating impacts on the flora and fauna located within the park and managing the growing number of visitors over the next 20 years?

Answer: Forests, wildlife habitat and natural communities were all addressed in the 2018 Long Range Management Plan Addendum. Our goal is to plan for and manage visitor use levels in a sustainable manner; this is something we have not been able to do without a roadmap.

There are areas where there are known populations of rare, threatened or endangered plants. There is no activity proposed for the locations with these populations. Human activity has been and will continue to be directed away from these locations. While the LRMP Addendum included GIS and site work to catalog rare, threatened and endangered species, a more thorough on-the-ground review will be conducted in the Intensive Management Area before any potential changes are made to the physical landscape. This is typically done during the predesign and permitting phase of construction projects, however we are pre-emptively conducting some of these assessments now to better inform concept planning work. There are several

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assessments scheduled for the 2019 field season including bat monitoring and field wetland review.

4. How does FPR intend to scientifically quantify the carrying capacity of the park? Does FPR have a plan to limit visitors to the park to mitigate overcrowding and exceeding the carrying capacity of the lake and surrounding park?

Answer: As part of the Master Planning analysis work, a carrying capacity study was completed. This analysis was conducted based on scientific studies and literature reviews including the US Bureau of Reclamation's "Water and Land Recreation Opportunity Spectrum Users' Handbook." This process is an established recreation management standard for evaluating appropriate use levels based on user perception. The Master Plan will help us determine what acceptable use levels are and design appropriate infrastructure accordingly.

5. Given that park visits have already exceeded 1999 projections to a significant degree, isn't it possible that FPR is again underestimating the natural growth in visitors over the next twenty years, even without further development?

Answer: The 1999 General Management Plan did not make visitor use projections. The Master Plan is using data collected in recent years to make informed decisions on what are the appropriate use levels and associated infrastructure needed to provide the desired experience. Since 2017, visitor use data at the park has become much more accurate than in previous years. One of our goals, regardless of projections, is to manage attendance through planning and design. Unchecked continued attendance growth in an unplanned environment will lead to environmental degradation. Careful planning and implementation of appropriately designed infrastructure will allow FPR to better manage and maintain high use areas and limit areas of impact as well as limit use, if necessary, to acceptable levels. Infrastructure will be designed to ensure long-term sustainable recreational access for park users.

6. Will the FPR plan include a provision to halt or reverse development if significant negative impacts on the lake's ecosystem are detected?

Answer: Should environmental conditions decline we would adjust practices and visitor uses to protect the lake. The Master Plan will be a road map that will guide management and infrastructure development. Implementation will be dependent on most immediate need, available funding and opportunity for action. The Master Plan will be re-evaluated if conditions or needs change in the future. Future significant negative impacts are more likely if a carefully developed plan is not created and implemented.

7. Has FPR considered alternatives to overnight camping and other elements of the current plan and has it documented a consideration of those alternatives?

Answer: There are a number of alternatives that are being considered in the Master Planning process, including day use options and overnight options; no overnight use is an option. The Master Plan draft concepts that are being evaluated investigate the potential for re-use of existing buildings and potential alternatives based on code review, environmental and historic preservation regulations, market analysis, and other factors. Assessments and documentation of the concepts is happening as the concepts are being developed using information from previous and current planning processes. Overnight camping in traditional campsites was eliminated from consideration during the 2018 Long Range Management Plan Addendum process in response to public concerns about potential noise. The concepts being developed run a range that is reflective of the public comment we have received both formally and informally. There are no predetermined outcomes and all options are being explored equally.

8. Are septic systems still under consideration given language in the contract with SE Group referencing "test borings and soil samples"?

Answer: As part of the evaluation of overnight use, restrooms and associated infrastructure are being studied. This includes a septic system necessary for wastewater disposal. Soil samples and test borings are mentioned in the SE Group contract but have not been funded. Further investigation would be premature at this concept stage; if no concepts that require subsurface wastewater disposal are chosen, there will not be a need for these tests. Existing soil mapping data is sufficient for the planning work now underway.

9. Given that the contract with SE Group state that the project will be ADA compliant how does FPR intend to mitigate storm water runoff into the lake from impervious surfaces, light pollution and impacts on nocturnal specie resulting from required lighting and other impacts on the ecology of the lake and surrounding forests resulting from ADA requirements?

Answer: ADA compliance can be achieved in many different ways to comply with stormwater and shoreland regulations. For example, pervious pavers have been used at another state park to create an accessible walkway to waterfront amenities. Stormwater infrastructure will be incorporated into construction designs when the time comes. The Shoreland Protection Act applies to any activity that would occur within 250 feet of the shoreline that alters the footprint of a structure or adds more than 100 square feet of impervious surface. Water quality protections in programmatic goals of Master Planning include:

• The project shall meet the goals of Vermont's voluntary Lake Wise Program.

Specific considerations include outlined in the RFP for planning services include:

- Stormwater Even though a stormwater permit may not be required, the selected team shall integrate Green Stormwater Infrastructure (GSI) concepts into the elements included in the project area. If a stormwater permit is ultimately required, the selected team shall integrate GSI concepts into the permitted system.
- All elements of design will be in accordance with the U.S. EPA Dark Sky program guidelines as applicable.

ADA guidelines do not have exterior lighting requirements, other than the placement of lighting and controls if it is used. Vermont State Parks has a long-standing policy of not lighting walkways and roads and would not propose to do so at Lowell Lake. Any external lighting that would be part of any structure would meet US EPA Dark Sky requirements; this is a Vermont State Parks system-wide construction standard. There are no anticipated impacts on surrounding forests from ADA-required infrastructure as these items would be within the already developed area identified as the Intensive Management Area in the 2018 Long Range Management Plan Addendum. We are proud of our commitment to make Parks available to people of all abilities and will continue to champion this objective.

Topic: Environmental Assessments

10. FPR has responded to calls for a comprehensive environmental impact assessment by saying it is premature. Given that the current iteration of the plan is not substantively different than the version from 1999, isn't an environmental assessment overdue on twenty-year old plan?

Answer: There is not a finalized plan; at the time these questions were submitted, there were no draft plans available yet for internal review.

An Environmental Impact Assessment is a Federal-level review required for projects covered by the National Environmental Policy Act. Since Lowell Lake State Park is state property, it is not subject to NEPA. Planning efforts that have taken place over the past 20 years have included many state-level environmental reviews -natural and forest resource, recreation, lake and historic preservation assessments. Additional assessments and reviews of Concept plans are being conducted. These include mammal surveys, wetlands surveys, an archaeologic resource survey among others.

Lowell Lake water quality has been monitored by DEC for decades. The lake's current condition is well documented; more information is available via DEC Lakes and Ponds score cards available online. This monitoring will continue to track the future condition of the lake.

Volunteer monitoring of the lake also takes place. Involvement of the local community to

enhance this monitoring effort would provide a larger data set for tracking purposes. There have been several public statements by members of the public that the lake has "critically low dissolved oxygen levels." Data collected and on file by DEC Lakes and Ponds does not support this claim. The data shows that Lowell Lake has clean water and is a healthy, functioning lake ecosystem.

11. Why has FPR contracted with a vendor to determine the feasibility of the development plan without including environmental impacts as one of the study's criterion?

Answer: Again, the Master Planning process is being conducted to evaluate several options for day and overnight use facility and visitor management. There is no "development plan." The result of the Master Planning process will be a concept document that will be used to guide future design and construction. In this concept phase, as previously stated, many environmental, natural resource and cultural assessments have been and are being conducted. These reviews have been and are being conducted by regulatory and stewardship professionals of ANR and its' respective Departments.

Topic: Wildlife

12. What specific input did FPR receive from Fish and Wildlife and DEC in the creation of the Plan?

Answer: As with all LRMP's, Department of Fish and Wildlife professional biologists participated in the draft development and completion. Given the public's high interest in wildlife on Lowell Lake State Park and in the context of the LRMP we will involve them additionally at the implementation phase to be certain that habitat management is a focus and is well executed. Staff from DEC Lakes and Ponds, Wetlands and Watershed Management, and Fish and Wildlife (habitat biologist, fisheries biologist and state lands ecologist) were all part of reviewing draft Concept plans. Because the process is not complete, there will be ongoing participation by stewardship team members as specific plans are refined. Once a final Master Plan is completed and phases are moved to implementation, Stewardship Team members will be involved to ensure project development will not conflict with conservation goals.

Topic: Regulatory Review

13. Will FPR commit to complying with the Town of Londonderry's zoning regulations designed to protect the lake and NOT seek waivers from those regulations?

Answer: Londonderry's Zoning Ordinances, specifically the Shoreland Conservation District, call for both protection of lakeshore and lake access for recreational development — "(C)(1) Shoreland (S) District The purpose of the Shoreland Districts is to maintain the scenic, ecological and recreation resources associated with Lowell Lake, Lily Pond and Gale Meadow Pond; preserve water quality and protect wildlife habitat; and preserve shore cover natural vegetation through the careful sitting of the location, design and intensity of residential development and associated activities." — quoted from Londonderry Zoning Bylaws, Adopted 2009.

Since the state park is not residential development, it is not clear how this directly applies. However, any potential improvements, reuses of existing structures, or construction of new infrastructure, would be designed to meet the dual intent of the zoning district of lakeshore protection while providing public access and would comply with the Shoreland Protection Act. The Town of Londonderry is seeking guidance from their legal counsel to get clarity on the applicability of the Shoreland Conservation District on the state park. The Town Zoning Administrator recently notified us that existing buildings at the park are "grandfathered" and not subject to the Shoreland Conservation District rules.

The Zoning Bylaws allow for Site Plan Review for developments within the Shoreland Conservation District. There are also provisions for exceptions for public use facilities, and a process for variances. Developments and improvements would therefore be in compliance and waivers would not be necessary. FPR's reading of the Zoning Bylaws do not find reference to any kind of waiver system.

14. Has FPR read the Londonderry Town Plan section dealing with Lowell Lake and will they commit to abiding by the intent of that plan?

Answer: FPR staff has read the entire Town Plan. The Lowell Lake Master Plan will be in compliance with the Town Plan by minimizing developments and prioritizing shoreland protection and would comply with Goal 3, Policy 3.7. Compliance with the Town Plan will be achieved through design and by regulatory tools such as the Shoreland Protection Act.

Topic: Biofinder, Forest Blocks and Critical Wildlife Habitat, Town Planning Policy

15. Vermont has a stated planning goal "to manage Vermont's forestlands so as to maintain and improve forest blocks and habitat connectors." How does the plan reconcile this goal with the fact that ANR's *Biofinder* application identifies?

Answer: We share the concerns about maintaining the ecological functions of forest blocks, surface waters and riparian areas. These features are regularly considered during ANR's planning and review of projects on state lands. As the Master Planning process moves forward, potential effects on these features and their ecological functions are being fully reviewed by ecologists and biologists from the Fish and Wildlife Department.

Lowell Lake State Park intersects with the following landscape-scale features: a priority interior forest block, a priority connectivity block, highest priority surface waters and riparian areas, riparian wildlife connectivity areas, and physical landscape diversity (representative landscape). As landscape-scale features, these are part of the "stage" of ecological function in the state. Occupying very large areas, they offer flexibility in management and stewardship to maintains ecological function while accommodating some uses on the landscape.

Specifically, while the park may have minor, very localized effects on species movement, the significant limiting factors on species movement in the region are roads and development. Uses of Lowell Lake State Park are not expected to have impacts to regional species movement.

Protection of the ecological functions of surface waters and riparian areas is a critical part of ANR's mission, and this is reflected in ANR's Policy and Guidelines for Riparian Management for ANR Lands. This policy states that management of ANR lands will "maximize riparian functions and values" and "provide for public access infrastructure ... designed and operated to maximize retention of riparian functions and values and minimize negative impacts."

Representative physical landscapes include the most common physical features found in Vermont. Conserving the ecological functions noted above will also conserve representative physical landscapes.

Lowell Lake State Park supports several rare and uncommon species that are closely associated with particular habitats. These species and their needs are carefully considered by Fish and Wildlife staff in the review and selection of any proposed management action. No activity is proposed for these areas.

On May 28, 2019 a loon nest was discovered on the eastern shore of Annie's Island by a Vermont Loon Conservation Project volunteer and the Park Manager. Signs and buoys have been placed to alert park users and paddlers of the nest and to stay away from it. Paddlers and predators such as raccoons and domestic dogs are common causes for nest failure. The nest will continue to be monitored by park staff and loon project volunteers.

• The already over congested approach to the park entrance on Lowell Lake Road as a High Priority Wildlife Crossing (Component Layer)

Answer: Roads can have a fragmentation effect on habitat connectivity, although this particular crossing has already been compromised by residential development. The approach to the Park is a town road and FPR will work with the Town and other ANR staff to address current and future issues to improve wildlife crossing opportunities and habitat connectivity. It is difficult to quantify the extent of traffic congestion on Lowell Lake Road – "over congested" is a subjective term that needs context to be understood.

 Much of the lake and its surrounding land mass is designated as a home to Rare Species (Component Layer)

Answer: While there are RTE species on this property none have been found in the area included in LUC 4.1 – the Intensive Management Area. If any are found appropriate action will be taken to ensure the individuals and their habitats are protected according to state law and recommendations from the District Stewardship Team, Fish and Wildlife and regulatory authorities.

• The entire perimeter of the lake as Riparian Wildlife Connectivity and Highest Priority Surface Waters and Riparian Areas (Landscape Scale Components).

Answer: Riparian areas and surface waters are very important features on this property, and all draft concepts under consideration will address ways to better protect these resources.

Decreasing impacts to riparian areas are a focus of Concepts. Concepts and future planning and Stewardship Team recommendations will comply with the Agency's Riparian Management

Guidelines for Agency of Natural Resources Lands guidance document which can be found at:
https://fpr.vermont.gov/sites/fpr/files/About the Department/Rules and Regulations/Library/Riparian%20Final%20Guidelines%20%28signed%20copy%29 resized.pdf

 Priority Riparian Blocks and Priority Connectivity Blocks within the lake area (Landscape Scale Components)

Answer: Any proposed actives will be limited to the Intensive Management Area to limit impacts to habitat connectivity. Concepts are being designed to improve conditions for wildlife in riparian areas.

The entire lake area as being part of a Representative Physical Landscape.
 How does the Plan evidence a "high responsibility for the conservation of these landscapes?" (From Mapping Vermont's Natural Heritage, Dept. of Fish & Wildlife, 2017, p. 47.)

We assume that what was meant to be quoted is highlighted below:

"Responsibility Physical Landscapes

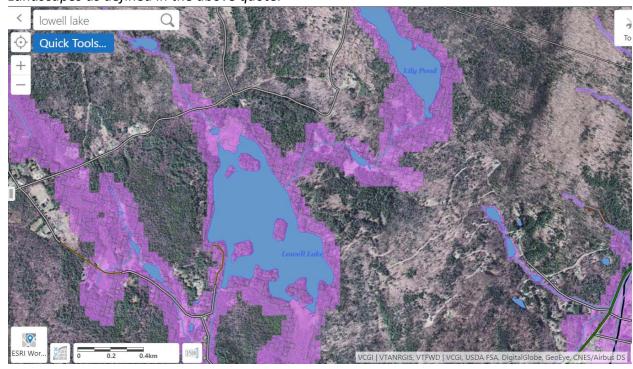
Some combinations of physical features are common in Vermont, but rare in the surrounding region or even worldwide. These are called responsibility physical landscapes since we have a "responsibility" to maintain them in our conservation efforts. While individual occurrence of a responsibility physical landscape may not appear particularly special within the local context, including examples of these landscapes in conservation efforts ensures that the species relying on these landscapes can persist at a grander scale.

Responsibility physical landscapes include locations with underlying calcium-rich rock, underlying mafic (magnesium- and iron-rich) rock, and cove landforms. While these are fairly common within the state, Vermont has a high responsibility for the conservation of these landscapes regionally.

Representative Physical Landscapes For each Ecological Land Unit not included on the "rare" or "responsibility" lists, high-quality examples were selected throughout the state based on condition and patch size. These are mapped as representative physical landscapes since they "represent" landscapes that include our most common species and natural communities. Common species and natural communities are every bit as important as the rare species conservation efforts often focus on, but without datasets like this, it can be difficult to include their importance on a map."

This section refers to physical landscapes, and not aquatic habitats, so we will assume that the question refers to the land area within the park surrounding the lake.

All lands surrounding Lowell Lake are mapped in the BioFinder 2016 as Representative Landscapes as defined in the above quote.



The Master Planning work seeks to maintain the integrity of the Representative Landscape that is spatially mapped within the Intensive Use Area.

 How does the Plan support the stated policy that "where possible, maintain or restore natural vegetation and limit development on rare and representative landscapes?"
 (From Mapping Vermont's Natural Heritage, Dept. of Fish & Wildlife, 2017. P.97.)

Answer: We will assume that this is the text that was meant to be quoted: "Physical Landscape Diversity: Where possible, maintain or restore natural vegetation and limit development on rare and responsibility physical landscapes. Forest management is compatible, so long as forest structure is maintained. Rare, responsibility, and representative physical landscapes can also be used as a prioritization tool to strengthen the importance of other features."

Draft concepts under internal review do contain components to restore natural vegetation, particularly along the shoreline in areas where vegetation has been opened up by visitors. The Master Plan draft concepts all involve areas that have been previously developed and used for recreational purposes for more than 140 years. This is all within the defined Intensive Use Area and includes only a portion of that particular Land Use Classification. Limiting the scope of the Master Planning work to these areas reflects this Planning Consideration authored by the Fish and Wildlife Department.

 The entire lake area will likely be part of the Town of Londonderry's efforts to map and protect critical habitats and connectors from segmentation in response to ACT 171. Will FPR support the town's effort to comply with ACT 171 by modifying development plans to avoid segmenting critical blocks and connectors?

Answer: As a matter of policy, towns may prioritize forest blocks for any reasons they deem important. Ultimately it is the Town of Londonderry that will decide if the lake area will be mapped or not; we are not able to speculate on an answer. The Intensive Management Area has a long history of human use – at least 140 years. Management activities and infrastructure in this area will not contribute to further parcelization of the landscape; no subdivision is proposed.

Topic: Environmental Assessments

16. How does FPR intend to address congestion, air pollution and quality of life issues that have already arisen along the community's roadways due to the organic growth to date, not to mention the increase in usage of the park resulting from the development plan?

Answer: FPR is conducting this planning effort to manage and minimize impacts on the state park. Issues of town-owned roads are outside the scope of FPR's authority to manage. FPR is committed to working with the town to continued efforts to reduce traffic, increase compliance

with town parking ordinances and assist the town in identifying funding sources for road improvements. FPR has for many years maintained Ice House Road, which is a town road that leads into the park.

17. Will FPR conduct an air quality assessment on the potential impacts of idling vehicles on roads leading to and from the park?

Answer: FPR is not aware of air pollution issues caused by the existence of the state park or its visitors. FPR will assist the town in connecting with DEC Air Quality and Climate Division to investigate studying air quality on Lowell Lake Road, if the town desires. The State of Vermont has a no-idle policy for state lands; FPR will enforce this within the park.

18. Is FPR aware that the existing cabins are likely covered with lead paint and will SE Group include the logistics and cost of lead mitigation near the lake in their site plan?

Answer: FPR owns and manages over 1200 structures in its 95-year old park system. Most of them were built before lead-based paint was phased out in the late 1970's. FPR has both inhouse staff trained to properly abate lead paint on structures, and utilizes certified contractors when appropriate. Lead paint abatement techniques are standardized and well established regardless of proximity to water features. It is assumed for planning purposes that lead paint abatement will be necessary.

19. How does FPR intend to address the potential impacts of a round-the-clock increase in traffic on the residents surrounding the park?

Answer: State parks have standard operating hours for day and overnight facilities, and standardized check-in times for campgrounds. Campers do not drive in and out of campgrounds on a round-the-clock basis in large numbers. Most campers check into facilities by early evening. The low number of units being considered in draft concept plans would not have a significant impact on traffic levels. The natural separation in day and overnight uses would not add large amounts of traffic to local roads at any time of day above what's being experienced now.

Topic: Community Involvement

20. In 1999 FPR partnered with a Citizens Advisory Committee. Will you consider directly partnering with the community once again as you move towards a Master Plan?

Answer: FPR created a Steering Committee in 1997 to help gather, provide and filter public input for the 1999 General Management Plan. A series of 14 public meetings were held during that process. Two public meetings and a focus group session were held during the writing and

refinement of the 2018 Long Range Management Plan Addendum. So far, 1 public meeting has been held and two more are scheduled for the Master Plan. In addition, at FPR's invite, the group known as the Lowell Lake Working Group, organized by Robert Nied, has held two discussions with FPR (an open invitation was made at the discussion to sit down with the Stewardship Team, which occurred on May 16, 2019). FPR will involve the working group and other public participation throughout the process. FPR has designed a public involvement process for public participation.

21. If FPR makes no substantive changes to the plan to address community concerns how will it manage the conflict with the host community and the broader community that values Lowell Lake as a critical local resource?

Answer: FPR and all of ANR also values Lowell Lake as a critical local resource. The park also plays a significant role statewide for the recreational opportunities available and the natural resources conserved there. FPR has used public feedback in the creation and refinement of all planning processes for Lowell Lake State Park since the 1999 General Management Plan was written. We have identified many of the same issues and concerns that the public has raised and have used them to inform the Master Planning process so far and will continue to do so as the Concept plans are reviewed internally and refined for public presentation, and ultimately as a final Concept Master Plan is finalized. We are increasing efforts to maintain periodic communication to aid in community relations. We are also working to get current information out from FPR so that up to date, accurate and factual information is available to all who are interested.