

Department's Response to Comments Received Regarding the First Draft of the Nash Stream Management Plan

What we heard: Draft Management Plan did not adequately address climate change issues

Response: The issue of climate change and its expected impacts to the natural resources of Nash Stream were a common theme in the comments. The primary comment received was that the original draft did not adequately address the issue. One of the challenges regarding climate change is the science regarding the best way to deal with it does not always agree. However, there are some generalities on dealing with climate change that are much more broadly accepted. It is in these areas that we tried to focus. In addition, the impacts of climate change are broad and far-reaching, and can affect all other chapters of the plan, including forest management, infrastructure, insect and disease problems, etc. Therefore, it was decided that a stand-alone chapter pertaining to this specific topic would be the most suitable way of discussing the issue. To make sure we have the latest thinking on this issue, the division contacted a regional climate change expert to help develop this chapter. Maria Janowiak works for the U.S. Forest Service as the Deputy Director of the Northern Institute of Applied Climate Science. Maria has provided advice and feedback on the climate change chapter in the current draft.

What we heard: Form a new stakeholder committee and develop a new draft; use a process more like the original plan

Response: Comments were received that suggested we should have a process more in-line with the original process used to develop the 1995 plan, and some suggested scrapping the first draft and starting the process over with a new stakeholder committee. The original plan was developed by a steering committee appointed by then-Governor, Judd Gregg. In addition to the steering committee, a technical team had been formed to work on the specific details of the plan. This process is described very well in the original plan as well as in the first draft of the current revision. The recent process was very much in-line with the original process, and that was by design. An appointed steering committee was not necessary in this recent process because in the interim between the 1995 plan and now, the Nash Stream Forest Citizen's Committee (NSFCC) was created in state law. The NSFCC fills the purpose of the original appointed steering committee, and has within law the specific purpose of "Providing advice to the department of resources and economic development and the fish and game department on any proposed revision to the stewardship or management plans required by the conservation easements on the 39,601 acres or the natural areas..." (RSA 12-A:9-c). The technical team in this most recent process almost mirrored the makeup of the original team. In addition to the work of the NSFCC and the Technical Team, this most recent process has been engaging the Council on Resources and Development (CORD) also, which is a requirement of the Land and Community Investment Program that provided much of the funding for the purchase of Nash Stream Forest. Therefore, it was determined that the process thus far is very much similar to the original process, with significant public input, and there is no need to appoint a new committee nor start the process over. However, due to the number of comments received, and the breadth of topics commented upon, the division has decided to go back out to public comment with a second draft, thereby giving the public and stakeholders additional opportunity to comment on the plan.

What we heard: Forest, Wildlife and Natural Heritage Inventories need updating

Response: There were several comments mentioning the need for updated information and data, particularly in regards to forest inventory and natural heritage inventory. While information does exist, much of it is well over two decades old at this point. In regards to the forest inventory, no timber harvesting is conducted in a compartment unless that compartment has an updated inventory, but updated inventories in the other areas will allow better forest management planning into the future. The primary reason the inventories are not updated is due to a lack of resources. This is not exclusive to Nash Stream, but is typical across department properties. It is recognized that in order to implement several of the goals in this new version of the plan, it will require updated information. To that end, the department requested, and just received, permission from the Joint Legislative Fiscal Committee as well as Governor and Council to increase funding from the Forest Management and Protection Fund (revenue primarily from timber sales) to help pay for this need. The additional money will be used to hire two seasonal forest technicians who will work on the Forest for the summers of 2018 and 2019 with a specific purpose of conducting forest inventory in the areas suitable for forest management. Additional money will be used to hire a contractor to establish Continuous Forest Inventory (CFI) plots on the Forest to monitor growth, as well as other things. Lastly, funding already in our current budget will be used for staff from the Natural Heritage Bureau to update the natural community typing using remote sensing and ground truthing. This work is also scheduled to begin in 2018. Once this information is collected, other parts of the plan, such as designation of control areas, can begin.

What we heard: Plan needs to mention sustainable harvest levels

Response: The original plan did not establish an allowable harvest level, but recommended the use of area regulation and a range of rotation ages from 80 years for softwoods to 140 years for northern hardwoods. The revised draft plan uses these same desired rotation ages and the acreage identified as suitable for timber management (ASTM) to determine harvest levels. Based upon these numbers, the revised plan identifies the annual amount of acreage that could potentially be regenerated (utilizing the uneven-aged silvicultural technique of group selection), or “tended” with intermediate harvests such as thinnings or improvement cuts, which would reduce stand stocking and allocate growth to the best trees of the desired species composition. In addition, we used Forest Inventory Analysis (FIA) data for the region to estimate annual growth rates to determine the amount of volume that could be sustainably harvested from the ASTM. As a check, the amount of volume that was harvested from all past timber sales since state acquisition was examined, and it was determined that at current harvest levels we are only cutting a quarter of the estimated growth in the ASTM. This amount is well within sustainable harvest levels (see *Growth and Stocking* and *Sustained Yield*; **Table 11** and **Table 15**). In an effort to more accurately track growth, we have plans within the next few years to locate and establish our own Continuous Forest Inventory (CFI) plots on Nash Stream Forest to provide property-specific data to ensure we are always cutting less than growth.

What we heard: Designate Control Areas called for in original plan.

Response: There were several comments regarding the designation of control areas that were called for in the original plan. The purpose of the control areas are to serve as an unmanaged baseline to which we could compare our managed areas, and therefore make inferences on how our management is mimicking, or diverging, from the natural progression of the forest. Under the current and draft plans, over 18,000 acres, or nearly half the property, are in natural areas. However, in order to have a true surrogate for us to compare against, the control areas must be similar to the managed areas. It was pointed out that although we have large acreages of unmanaged lands, they aren't necessarily of the same characteristics as the managed lands. Therefore, in order to determine where we need control areas, we need to first conduct an updated inventory of the natural communities as mentioned in a previous section. Once that is completed, we need to ensure we designate control areas that are representative of the managed areas. The size and location of these control areas will vary by natural community type, etc. The current team has researched past designation of control areas, and while a GIS shapefile of control areas was found, there was not conclusive evidence on why, where or how they were designated. Another issue identified was the proposed size of the control areas in the original plan. While the suggested control size of several hundred acres for hardwoods should be easy to accommodate, the original plan called for a softwood control area of approximately 1,500 acres. However, according to a soil analysis, only 374 acres of manageable area are conducive for softwood, with another 1,270 acres of mixed wood, although this is in total and not contiguous, and therefore a softwood control area of this may not be feasible within the currently managed area. *This new draft revisits this process and control area designation based on the collection of updated information and GIS analysis.*

What we heard: Don't change the Vision

Response: The issue of the Vision for the property was not only mentioned numerous times, it also had some of the most passionate pleas. While changes were minimal, the change in the first draft that drew the most comments was the addition of a bullet specific to ATV and UTV usage. The intent was to specifically state that this type of use would be limited, in designated areas only, and only where they do not negatively impact traditional uses or conservation values. However, we received several comments that stated ATV's should not have a specific bullet, and that this in effect is highlighting the use above other recreational uses of the property. Some comments specified we should keep the original 1995 vision. It should be noted the current vision was modified during the 2002 update process. The original 1995 vision regarding public access mentioned traditional recreational uses, to include "...hunting, fishing, hiking, and snowmobiling in designated areas." It was during the 2002 update of the plan that ATV's were first allowed, additional language was added to the end of the previous bullet that stated "...as well as offer other limited motorized access." *Because the intent was for all motorized access to be a limited recreational use of the property, we have changed the vision statement back to the 2002 version, and removed any specific mention of ATVs/UTVs.*

What we heard: Increase riparian buffers around all waterbodies

Response: The current conservation easement held on Nash Stream Forest by the U.S. Forest Service already restricts cutting within 150' of Nash Stream itself, as well as all of the ponds. Timber harvesting on this property, as well as other department properties, is conducted in accordance with the publication *Good Forestry in the Granite State*. This 2010 publication includes recommendations for riparian buffers based upon stream order (Strahler method) that were agreed upon by a broad stakeholder group, and these recommendations exceed state basal area laws for cutting along waterbodies. While we meet those recommendations at a minimum, we often exceed these based upon on-the-ground review of topography, soils, wetlands, wildlife needs, etc. In addition to our own foresters laying out a timber harvest, every sale in Nash Stream is individually reviewed by Fish and Game biologists, who make additional recommendations if necessary. The Nash Stream watershed is one of the most closely-monitored cold-water fisheries in the state due to the nationally recognized work being conducted to restore the fishery by Trout Unlimited and Fish and Game, working with Forests and Lands. If current riparian buffers are having a detrimental effect on water temperature, oxygen level, fish populations, etc. it would be discovered by these monitoring efforts. At this time there is no evidence to date that current practices for riparian buffers need to be modified or changed, in fact, the fishery is improving quite well. Therefore, it was determined that without a scientific basis that current riparian buffers are not adequately protecting the water quality at Nash Stream, it does not necessitate a change in the buffer widths in this next draft.

What we heard: Concern over shift in forest management emphasis from Uneven-aged to Even-aged.

Response: Several comments received were concerned that the management emphasis would change from uneven-aged forest management to even-aged. Uneven-aged management uses single-tree selection and small group cuts as an example of the natural, small-scale disturbances common in a northern hardwood forest type. This type of management eventually leads to multiple ages classes and favors the later successional species, such as maples, beech, spruce and yellow birch. Even aged management uses larger openings and is meant to replace the stand, mimicking a larger scale disturbance. This type of management allows for early successional species such as aspen and paper birch, which would otherwise phase out over time since they do not readily survive or grow in the shaded understory of a mature canopy. Even aged management, as the name implies, results in a stand of trees all within one or two age classes. Larger openings also allow for greater herbaceous and shrubby habitat due to the exposure of the forest floor to sunlight. The intent of the original plan, and the first draft of the revision, has always been to make uneven-aged management the preferred management. However, it should be noted that there are occasions when even-aged management may be desirable or necessary. Managers felt the language pertaining to even aged management in the original plan was so restrictive as to basically prohibit its use except in the most-rare of circumstances. In the 25+ years of state ownership, only one clearcut has been conducted on the Forest, for the purpose of a salvage. It is always intended that clearcutting will be minimally used, and only when uneven-aged management techniques won't work, but the agency wants to make sure we can use this practice when necessary. It should be noted the easement held by the US. Forest Service already restricts the size of clearcuts. During the revision and comment period, we spoke with several of the authors of the original plan. Based upon those conversations, it was determined we may have been interpreting the language as more restrictive than was originally intended. While the

authors strongly agree that uneven-aged management is the primary management, they felt the original language gave us the ability to use even-aged management for those occasional, yet infrequent, circumstances where uneven-aged management will not achieve the management objectives. Based upon this information, this revised draft goes back to the language in the original plan.

What we heard: Concern over re-wording of Forest Management Principles

Response: The Vision for the property, in its entirety, includes three parts: 1. The Management Vision, 2. The Management Principles, and 3. The Management Goals. All three parts have been restored back to the 2002 version in this latest draft. The intent of rewording the Vision and Principles was to try to add clarity, but based upon concern that new wording could be construed as a change in management philosophy, we are leaving the wording as it has been for the last 15 years. The Management Goals were not intended to change, but they were inadvertently left out of the first draft.

What we heard: Add control measures for invasive species

Response: The original draft addressed invasive species to a degree, but did not go into detail of actual control measures that would be undertaken if and when invasive species were located on the property. Therefore, the new draft adds additional references to where we would seek specific control recommendations, as well as includes information on where we currently know invasives to occur on the property. Lastly, another comment suggested moving the invasives section into the forest protection chapter, so this switch was made in the new draft.

What we heard: Concern over removal of management guidelines for Natural Preserves

Response: The guidelines were included in the previous draft for the forest management chapter, but not the other chapters. This was simply an editing oversight that the guidelines did not move forward for the other chapters. Therefore, all of the management guidelines that were in the plan previously are once again included in the revised draft.

What we heard: Address access for people with disabilities

Response: The department's goal is to provide equal access to all facilities within the agency, and to treat everyone with dignity and respect. The department has an access policy for all lands, not just Nash Stream. This policy addresses Other Power Driven Mobility Devices (OPDMD) in pedestrian areas and is consistent with federal regulations. Part of the policy states that an OPDMD shall not create a substantial risk of serious harm to the immediate environment or natural or cultural resources. ATVs and UTVs are not designated as OPDMD in the policy. Persons with disabilities may use an OPDMD as detailed in the policy in areas open for pedestrian use. OPDMD's that are powered by an internal combustion engine are prohibited on all state reservations. The department also has a practice whereby we

will open gates to vehicle access upon request for someone with mobility disability to retrieve big game, such as a deer or moose. The new draft attempts to clarify the department policy regarding access for all abilities. The full policy has been added as Appendix H.

What we heard: Add backcountry skiing proposal into the plan

Response: The department received a request from an entity representing the interests of backcountry skiers. This organization requested a pilot project be implemented on Nash Stream within the next 2 to 5 years. Percy Peaks and Sugarloaf Mountain were specifically mentioned as areas that already see backcountry skiing. While this type of recreation is already an allowable use on the forest, there are not designated areas, and instead the use is dispersed. It was felt a pilot project such as the one proposed (which would require cutting and removing understory trees) would be better suited at a different state property at this time. Therefore, the department is currently working with this group on a pilot project at Weeks State Park in Lancaster instead.

What we heard: Add an East-West connector ATV trail along the southern boundary

Response: The department received numerous comments calling for the addition of an east-west ATV/UTV corridor along the southern boundary of the property. In fact, the department received more comments on ATVs than any other topic. In order to properly address this topic, it is helpful to know a little history. This discussion is not new, and goes back to the original plan development. While only a fraction of their current popularity, off road vehicles were discussed during the original plan development 20+ years ago, and the decision at that time was to prohibit them from the property. The purpose and objectives of the state purchasing Nash Stream were clearly laid out, and the intent was traditional uses that were already in existence on the property when the state acquired it. Less than ten years after the plan was completed, there were calls to allow limited ATV riding on the property. Based upon public input, and legislation specifically referring to Nash Stream Forest during the 2002 session, the department decided to open up an existing woods road on the west side of the property as a trial trail. This trail was already in existence, it started and ended off Nash Stream Forest, and skirted the western edge avoiding the core of the property. During the course of the trial, numerous studies were conducted to determine the effects of the trail on the environment. After several years of use and monitoring, then-Commissioner of DRED George Bald approved the West Side Trail as a designated ATV/UTV trail. Around 2010 another request was made of the department to allow an east-west link through Kelsey Notch to connect sections of the "Ride the Wilds" corridor. Once again, after review by multiple entities and the Nash Stream Forest Citizens Committee, the department opened up Kelsey Notch Trail as a pilot. In both cases, the trails were pre-existing roads, and therefore the allowance of ATV's was in addition to a use that was already occurring. The current request for a southern east-west corridor is different. While it would follow an existing (albeit not maintained) woods road for part of the way, it would require brand new trail construction in areas that are currently unfragmented. The trail would enter areas of the forest that are considered prime wildlife habitat, including a beech stand and a lowland spruce-fir stand. In addition, it would require considerable earthwork to modify the topography adjacent to Rowell's Brook in order to avoid erosion into the stream. Unlike previous requests, this is not a request for ATV's as a secondary

use for already-existing road infrastructure, but rather the construction of new trail explicitly for the purpose of ATV expansion on the property. In addition, this proposal was brought before the Council for Resources and Development (CORD), who shares management oversight of the property due to the LCIP funding that was used in its purchase. CORD voted not to approve the proposed trail. While the original plan prohibited ATV use, the department has tried to strike a balance over the years to accommodate all recreational users by allowing limited motorized use in certain areas on the property, such as the West Side and Kelsey Notch Trails, where such use does not detract from traditional uses or conservation values. It should also be noted the department has supported ATV expansion in several other areas of the North Country such the purchase of the 7,800 acre Jericho State Park for the primary purpose as an ATV destination and the complicated land swap with the Umbagog National Wildlife Refuge so we could acquire federal property and thus allow a link for “Ride the Wilds”. *In this instance however, it was determined the proposed east-west corridor would adversely impact the resources and conservation values for which the property was purchased and therefore it was not included in the revised draft.*

What we heard: Add a southern connector ATV trail from the West Side Trail to services

Response: This proposal was requested to allow ATV/UTV riders on the West Side Trail to connect to either the main Nash Stream Road or a snowmobile trail that would connect to a town road where they could access fuel. Based upon the history described above, this proposal was considered differently than the southern east-west connector. It uses existing roads, is on the southern margin, and stays out of the core of the property. *To be consistent with the department’s past practices on the property, this proposal was included in the revised draft for review.* It should be noted inclusion in the plan only allows for the review, and is not a guarantee that it would be allowed. Any proposal would still need approval by CORD, the Nash Stream Forest Citizen’s Committee, passage of the coarse and fine filter criteria, an updated MOU with Fish and Game, and other internal department review processes.

What we heard: Do not allow any additional ATV expansion on Nash Stream

Response: There were several comments that called for a status quo in regards to ATV trails; they were okay with existing trails but opposed any new or additional trails within the life of this next plan. As stated above, we received two primary proposals from the ATV community; an East-West corridor along the southern boundary, and a southern connector trail that would connect West Side Trail to services south of the property. The East-West corridor trail was not included in this current version due to the factors mentioned above, however, the southern connector proposal is considered. It should be noted that inclusion of a trail proposal in the plan only means that it will be evaluated, and does not confer automatic approval. The reason the department chose not to just shut the door on any ATV proposal is multi-fold. It was felt if a proposal closely matched past practices in regards to ATV trail designation on the property, it should at least be considered for further evaluation. The department feels it should remain consistent to the best extent possible on trail designation, rather than have an arbitrary threshold on the number or amount of trails. Whether or not an ATV trail should be allowed should be based upon a known and documented set of reasons and criteria. Criteria such as the fine and coarse filter for OHRV trail location, consistency with the Vision for the property as outlined in the Plan, consistency with the terms of the

Easement held by the U.S. Forest Service, consistency with the statutory requirements of our agency, consistency with the requirements of LCIP funding, and so on. It is no secret that ATV usage has expanded exponentially in Coos County since this plan was last revised. Since these are public lands, purchased with public funding, and recreation is one of the statutory reasons the department owns lands, it must give equal consideration to all users. While it may be determined, based upon a thorough evaluation of the aforementioned reasons and criteria, that additional ATV trails may not be appropriate for Nash Stream, it is felt this is best determined based upon the evaluation and merits of specific proposals verses an outright prohibition on new trails.

What we heard: Do not allow any (existing or new) ATV use on Nash Stream

Response: A few of the comments received by the department suggested there should be no ATV usage on the Nash Stream property, including existing trails. Some indicated that the property was never purchased for that type of recreational use. Motorized recreation, specifically ATV use, has been allowed on the Nash Stream Forest since 2002, or for the past 15 years. The original management plan only lasted seven years before it was revised to include ATV usage. Therefore, ATV use is not new to this property in terms of state ownership. It should also be noted that although several comments suggested this was not intended as a use of the Forest, there were no ATV prohibitions enacted upon the purchase of the property. Neither the deed, federal Easement, LCIP funding requirements, nor state law expressly prohibits ATV usage on Nash Stream Forest. Instead, the decision of whether to allow or deny motorized recreation has been left to the management plan, with a requirement of input by the public. While the original plan did not allow ATV's, as stated, they were allowed beginning in 2002, with a statement that future designation of ATV trails would be the decision of the Commissioner. The 2002 revision also set a revision schedule for the plan, which requires the department to review it every 10 years. The management plan has, and will, change over time based upon new information and public feedback. Therefore, it is the opinion of the department that during a plan revision, ATV usage must be evaluated equally along with any other recreational proposal.

What we heard: Lack of input by Towns

Response: Per RSA 12-A:9-c, a representative of each of the three incorporated towns are represented on the Nash Stream Forest Citizen's Committee. These appointees are chosen by the selectboards of the represented towns. In addition to the incorporated towns, the Coos County Commissioners' delegate represents the Unincorporated Place of Odell. The statute was specifically set up to ensure the towns have a voice on the committee, and therefore in the management of Nash Stream. In addition to having a specific member on the committee, any other member of a town or public can attend and provide input at Nash Stream meetings. All meetings are posted and advertised in advance pursuant to RSA 541. Based upon the aforementioned, it is felt the towns are sufficiently represented and have an effective means of providing input into the plan and the ongoing management of the property.

What we heard: Expand Carbon Market discussion

Response: The department received a few comments regarding carbon markets. While the original draft did mention carbon markets, the new draft incorporates some additional suggested language to strengthen this topic. Carbon market discussion is located within the forest products section. The department will continue to monitor and evaluate the potential market for carbon at Nash Stream Forest as an additional forest product and potential source of revenue.

What we heard: Use Nash Stream for more educational purposes

Response: There were several comments received that suggested Nash Stream should be used more for educational purposes. The department welcomes requests for research on any of our properties, Nash Stream included, and annually grants Special Use Permits or Research Licenses for educational purposes. From 2015 to current, the division of forests and lands issued 33 research licenses to entities wanting to perform various studies on department lands across the state. In addition, our properties are used for other educational purposes including such things as outdoor classrooms for local schools, continuing education workshops for foresters, and workshops for municipal officials. In regards to more formal research, the division has its own research forest in the southern part of the state. Fox State Forest in Hillsborough has been associated with forest research since 1933, and conducts research both at Fox Forest as well as elsewhere. For the northern part of the state, the division often looks to research from two well-established and nationally respected research forests on federal property: Hubbard Brook and Bartlett Experimental Forests. The forest types found in the managed portions of Nash Stream Forest are also present in one or both of these experimental forests, and therefore serve as a good proxy. That said, the department feels it would be worthwhile to establish a more formal relationship with an educational institution going into the future. This latest draft once again incorporates designation of unmanaged control areas, which would serve as benchmarks upon which we could measure managed areas. The department does not have the resources necessary to undertake regular monitoring of these control areas, and does not expect additional resources, and therefore a relationship with an educational institution would be very helpful to collaborate with in accomplishing our goals as outlined in the new plan. The department plans to reach out to Plymouth State University as well as the University of New Hampshire to determine interests and capacity.