Robbo Holleran Forester

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Department of Conservation and Recreation Office of Public Outreach 251 Causeway Street, Suite 900 Boston, MA 02114

December 10, 2012

Re STAC DWSP Watershed Forestry Program

I have read the entire report with considerable interest. This is refreshingly scientific, making clear distinction between public perception, emotional responses and established facts. The historical context and review of the current controversy should be very helpful to many readers.

I am a private forester in Vermont, and licensed in Massachusetts with 30 years experience. I have been involved in public education and professional education throughout my career, and currently serve as president of the Vermont Forestry Foundation. I was selected as the third author for the current revision of the "Silvicultural Guide for Northern Hardwoods and Mixedwood types" with Bill Leak and Mariko Yamasaki because of my practical approach and experience.

The "time tested principles and practices of water supply management" lead us to a crisp conclusion for active management. The city of Denver wishes they had the foresight to apply this in previous decades, before the timber industry left Colorado, forest health declined, and fire susceptibility rose. While the Quabbin forest is less impacted by fire, hurricanes and other weather events are the major factors for which to plan.

Your conclusion for increasing species and structural diversity through active management is warranted. This will create a more resilient forest for any contingency. Slightly reduced forest transpiration is expected, and improved wildlife habitat is a by-product. Irregular shelterwood is an applicable procedure, and this is also well described in the current revision of the hardwood silvicultural guide (not in print yet). There are many variants, which are all applicable. 'Regular' shelterwood has the removal cut in 5-15 years, providing an even aged stand. The term 'irregular' has been used to define where the removal harvest is delayed for 20+ years. We have called this 'deferred shelterwood', and used 'irregular' to define the special arrangement as 'disuniform'. So, a dis-uniform shelterwood, with deferred removal of the overstory for 20+ years, creates structural and species diversity, and can be flexible in treating "microstands" from previous disturbance or management. It can also be used for a full range of species, and to transition into 2-aged or multiple aged stands.

I would suggest retaining patch cutting options, and thinning. Especially for areas where undesirable understory has become established, the full daylight and scarification of larger openings may be the best tool to promote diverse regeneration. The 'modified patch cut approach' described in the report is useful. Though not well researched, there is some experience that natural regeneration may out-perform invasive shrubs such as buckthorn or honeysuckle in large, scarified groups without the use of herbicides.

It is important for public policy people to understand the historic successes, occasional failures and complexities of land management at the Quabbin, specifically to interact with the public. The general public is not well informed on forestry matters, and is in fact, largely mis-informed. It should be an important goal of the land management team at DCR to actively engage in public education. Unfortunately, Massachusetts and every other state, has a Dept of Education which seems to be working in a different direction. I have specific recommendations:

- 1. Active harvesting sites that are visible to the visiting public should have detailed interpretive signs that stay at the site for at least three years. These should explain the overall goals of management (species and structural diversity for watershed resiliency) and specific history of the harvest area. They should explain the specific goals, and perhaps have pictures of what the area should look like in 3, or 5, and ten years. A blurb on the wildlife benefits would be helpful. Other appropriate information should be available at other popular spots.
- 2. While the report makes good sense in explaining competition among trees for "light, water and nutrients", light is most important. In New England, competition for water and nutrients is minor at best. A look at tree rings of areas that have been thinned show distinct release (increase in radial growth) at each thinning, with slower growth as crowns become compacted. Radial growth is a direct measure of the health of the trees and available carbohydrates. Most people have the mis-informed idea that tree rings show a record of weather, especially rainfall. This is only true in very dry forests. This one educational point is essential in explaining the benefits of active forest management.
- 3. Someone at the Dept, with the proper zeal, knowledge and writing/speaking skills, should allocate a specific amount of time to public education. This might involve a monthly column for magazines, or general press release. Forest tours for school groups, colleges, and professional education are helpful. Website maintenance should be on-going. Other venues for public interaction will present themselves, and there should be a go-to person who is ready and willing to take these on.
- 4. The opportunities for the interested public to use the land should be increased. Whether this is hunting, fishing, picnicking, or other recreation, provides an opportunity for the general public to benefit from this vast resource and be supportive. Hunters should be particularly receptive to active management, with the correlation to game species habitat. I realize this has risks, and any goon with a cell-phone camera can make misery for you. But with the interpretive signs and education mentioned above, I think most criticism can be dealt with.
- 5. Your 25 page summary and 4-page overview are important, as noted above. I would suggest using photos, as provided in this report, or images as used in DeGraaf et al "Technical Guide to WL management" in explaining forest management options over time. These could easily translate into a quality website for a range of user-groups, and could be the 'chopping block' from which other educational materials are derived. I would be glad to assist in preparing these, or in training someone for forest education.

Yours,

From: Andy DeSantis [mailto:andy.desantis@gmail.com]

Sent: Friday, January 11, 2013 10:26 AM

To: Updates, DCR (DCR)

Subject: STAC

To Whom It May Concern:

Please be informed that as a Commonwealth of Massachusetts Grade 4 Distribution and Grade 3 Treatment Licensed Water System Operator and as a Massachusetts Arborist Association Certified Arborist, I fully support the adoption and implementation of all 9 recommendations contained in the STAC report.

Andrew B. DeSantis 25 Serino Way Saugus, Massachusetts 01906 andy.desantis@gmail.com Arlington • Ashland • Bedford • Belmont • Boston • Braintree • Brookline

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January 14, 2013

Jonathan Yeo, Director
Division of Water Supply Protection
251 Causeway Street
Boston, MA 02114

RE: Science and Technical Advisory Committee Report on Watershed Forestry Program

Dear Mr. Yeo:

On behalf of the MWRA Advisory Board, I would like to thank the Department of Conservation and Recreation for providing us the opportunity to comment on the Science and Technical Advisory Committee (STAC) Final Report of the Massachusetts Division of Water Supply Protection Watershed Forestry Program.

First, I feel it is important to provide a short history:

In late 2009, with a recent controversial cut on Woodward Road in Petersham, followed up with a March 2010 Boston Globe article entitled "A Clear Cut Controversy," the state decided to place a moratorium on watershed forestry activities (logging) and reconvene an existing team of science and technical advisors to review the principles of the Office of Watershed Management's Forestry Program.

Over the next 30 months (much to the chagrin of the Advisory Board, which questioned why it was taking so long), STAC reviewed forestry activities.

Unfortunately, while the STAC committee reviewed activities, almost no logging was occurring within our watersheds, which concerned the Advisory Board. First and foremost, from an environmental perspective the Advisory Board strongly believes an actively managed and protected forest provides a critical filter for the protection of our drinking water. Secondly, from a ratepayer perspective, nearly \$1.5 million in potential forestry revenue was lost.

The committee finally released its report in December, developing a series of nine findings and conclusions and five recommendations.

The Advisory Board's comments are not to challenge the experts but speak to moving forward and are limited to three points.

First, STAC has identified how best to proceed moving forward. ADOPT THE STAC RECOMMENDATIONS FULLY AND IMMEDIATELY.

Second, as you move forward with forestry activities, **STAY WITHIN TOTAL COMPLIANCE OF THE STAC REPORT.**

Third, DCR NEEDS TO IMMEDIATELY REACT AND RESOLVE MISTAKES AND MISUNDERSTANDINGS, AS WELL AS SWIFTLY ADDRESS AND CORRECT HALF-TRUTHS AND MISINFORMATION CIRCULATED TO SERVE OTHERS' AGENDAS.

Frankly, a lot of the past 30 months could have been averted if DCR had done a better job of communicating to all of the stakeholders.

Thank you again for providing us with the opportunity to comment on the report. The Advisory Board looks forward to the reactivation of the forestry program.

If you have questions, comments or concerns, please feel free to contact me at 617-788-2051 or via email at joseph.favaloro@mwra.state.ma.us.

Sincerely,

Joseph E. Favaloro Executive Director

cc: Richard Sullivan, Secretary – Executive Office of Energy and Environmental Affairs
Edward Lambert, Commissioner, Department of Conservation and Recreation
Fred Laskey, Executive Director, Massachusetts Water Resources Authority
Katherine Dunphy, Chairman, Massachusetts Water Resources Authority Advisory Board
Kathy Baskin, Director of Water Policy, Executive Office of Energy and Environmental Affairs



485 Ware Road Belchertown MA 01007 (413) 213-0454 fax: (413) 213-0537

email: info@wscac.org

January 17, 2013

Commissioner Edward M. Lambert Department of Conservation and Recreation 251 Causeway Street, Suite 900 Boston, MA 02114

Re: STAC Report on DCR/DWSP Watershed Forestry Program

Dear Commissioner Lambert,

The Water Supply Citizens Advisory Committee (WSCAC) appreciates the opportunity to comment on the Division of Water Supply Protection's (DWSP) Science and Technical Advisory Committee (STAC) Review of the Massachusetts DWSP Watershed Forestry Program.

Formally contracted as the water supply advisory committee to the MWRA Board of Directors and staff, WSCAC develops positions on water resources management, produces written comment on environmental reviews and makes recommendations to the MWRA on other relevant state, regional and federal agency issues.

The foundation of our interest in DWSP's forestry program is based upon the belief that an unfiltered public water supply system requires the highest standards of forest management whose primary purpose is a sustainably managed and resilient watershed forest.

In response to the announcement of the Forest Heritage Plan in April 2010 by former EOEEA Secretary Ian Bowles, DCR's DWSP reconvened the STAC to review the principles of the Office of Watershed Management's forestry program in the Quabbin, Ware, and Wachusett watersheds.

The STAC committee reviewed the principles guiding current Land Management Plan objectives and forest management practices for the watersheds and developed draft recommendations for refinements of those objectives and practices. Dr. Paul Barten, Committee Chair, presented the report in Barre on December 10, 2012 to the Quabbin and Ware Watershed Advisory Committees and to the public.

In reviewing the STAC report, WSCAC supports the following findings summarized here:

- DWSP forests, water supply reservoirs and the MWRA distribution systems are irreplaceable assets that call for
 the highest attainable standards of management. As an unfiltered public water supply for more than 2 million
 people, any activity occurring on watershed lands and forests must ensure the protection and maintenance of water
 quality.
- The Quabbin and Wachusett Reservoirs do not have an infinite capacity to absorb any shock or stress from natural or human activities. Damage to the watershed forests caused by insects and disease, by severe storms or very high winds, or by a potential combination of these events potentially could affect the resilience of the forest and thereby the quality of the water supply.
- Active forest management to promote various age classes and increasing species diversity through regeneration
 can minimize the adverse effects of disturbance on streamflow and water quality. A forestry program that is
 planned according to accepted water supply protection practices, is publicly transparent and is well supervised can
 provide a practical, balanced approach toward preparing for and minimizing the effects of natural disturbances.

- Funding of the land acquisition program must continue, particularly in the Wachusett watershed, to help protect the water supply from quality degradation often associated with encroaching development.
- An internet-accessible summary of the DWSP Land Management Plans that explains forest management practices
 including links to lot reviews, cutting plans, and contact information to address public questions and concerns is a
 widely recognized public need.
- The STAC report emphasizes that the watershed forestry program is aimed at managing the forests so that they can quickly bounce back after a "perfect storm" of disturbances, such as a serious drought followed by a catastrophic hurricane. Studies have shown that forest resilience is tied to biodiversity at multiple scales, from genetic to landscape diversity (Thompson, 2011¹). Though the STAC report doesn't offer detailed methods for maximizing resilience or biodiversity, WSCAC agrees with the basic recommendations noted in the report and feels that they are aimed at increasing biodiversity and therefore forest resilience.

WSCAC supports the resumption of the DWSP forestry program and makes the following additional recommendations for its implementation:

- There is a need for consistency in applying the best forest management practices and standards in all DWSP watersheds. Reviewing the Land Management Plans to address inconsistencies will help minimize conflicting interpretations of DWSP plans and practices. Site specific adaptation of the irregular shelterwood method is recommended as the primary approach to diversifying stand structure and species composition in the STAC report.
- Open lines of communication and quarterly visits between DWSP foresters and their superiors with on-site supervision at regular intervals to quickly identify and address deficiencies or other problems arising during forestry operations are essential.
- Water quality monitoring in close proximity to harvesting sites can provide information on the effects of forestry operations over time.
- Lot reviews should highlight the history, unique characteristics, and significant features and provide a clear explanation for the particular management strategy of each area recommended for harvesting and/or other silvicultural treatment. Reviews should be made easily available to the public. Scheduling guided pre-harvest and post-harvest walks would provide transparency and public education of the watershed forestry program.
- Invasive plants may pose a threat to the regeneration of native species and therefore affect long-term forest resilience. The STAC report was silent on recommendations of how to address the problem of non-native invasive plants. Environmentally protective strategies should be used to counter the spread of invasive plants such as glossy buckthorn, bittersweet, barberry and multiflora rose.
- An active road maintenance program as discussed in the Quabbin Reservoir Watershed System Land Management Plan, Section 5.3.6 is essential for harvesting operations, fire protection, police patrols and water sampling.
- A culvert maintenance program is needed to address deficiencies on an ongoing basis.

FSC Certification

WSCAC favors restoring Forest Stewardship Council (FSC) certification for DWSP watershed lands. The DWSP forestry program is a cost effective way to shape the forest vegetation into a watershed protection forest with FSC providing additional review, oversight, and the opportunity for improvement. We are aware of criticism regarding the lack of public

 $^{^{1}\ \}textit{REFERENCE: Thompson, I. "Biodiversity, ecosystem thresholds, resilience, and forest degradation. Unasylva~238, Vol.~62,~2011/2.}$

involvement in the certification process and a concern that the system is based on commercial harvesting criteria rather than on watershed-based forestry. However, we believe such concerns are outweighed by the following benefits of FSC certification:

- o An additional layer of transparency, expertise and accountability;
- o Increased public confidence in forestry practices on the watershed;
- o Endorsement by numerous credible nonprofit organizations;
- o Interaction with outside experts that can lead to improved DWSP forest management practices;
- Annual audits that can result in corrective action requests (CARs) and recommendations that provide forest managers and the public with additional oversight and expertise on good management practices.

Though FSC certification may not lead directly to improved water quality, it might make for a better forestry program, which could ultimately be beneficial for long-term water quality.

We thank you for the opportunity to comment.

Whitney Beals, Chair

Lexi Dewey, Executive Director

Mittey L. Beal

From: gregory cox [mailto:gcox@crocker.com] Sent: Friday, January 18, 2013 12:04 PM

To: Updates, DCR (DCR)

Subject: STAC report comments

Good Morning:

I read through the recently issued Review of the Massachusetts DWSP Watershed Forestry Program report by the Science and Technology Advisory Committee.

This appears to be a pretty thorough review of forestry operations, logic and results on the Quabbin and other watersheds by DWSP.

I read the committee's recommendations for resuming forestry activities, including timber harvests, on the watersheds and I would like to support those recommendations. They have clearly considered the need for regenerating parts of the forest to create younger forest to filter and absorb nutrients in periods of peak flows from storms like Hurricane Irene last year.

In my job as emergency management director for the Town of Hawley, we received training from the National Weather Service for hurricanes that warned that the 1938 hurricane blew down 91 million trees in one Massachusetts county alone. A similar Catergory III hurricane now would create even more severe blowdowns because so much of our woodlands are mature, the trees are taller and larger and hence more subject to windthrow.

Clearly if the Quabbin watershed was in the path of such hurricane, the devastation to the forest canopy would be extreme and the potential for water degradation very high.

The recommendations to resume the forest management program at the Quabbin, albeit with some modifications to how the harvests are implemented, seem very reasonable given the potential risk from severe weather in the coming decades.

I also think that the committee's recommendations that DWSP create websites that show how areas that are harvested regenerate and grow over time would be beneficial, both to public understanding of why the Quabbin is actively managed, and as a way to show how the forest evolves over time under management.

At the same time, I would suggest that DWSP have its foresters hold periodic tours of managed sites on the Quabbin, including both ongoing work, and demonstrations of other sites harvested 5 or 10 years previously so participants can see with their own eyes how the forest changes and regrows.

Thank you for the opportunity to comment.

Gregory Cox 13 Pond Road Hawley, MA 01339 (413) 339-5526 Gcox@crocker.com



Advocacy Department

Six Beacon Street, Suite 1025 A Boston, Massachusetts 02108 tel 617.962.5187 A fax 617.523.4183 A email jclarke@massaudubon.org

January 18, 2013

Commissioner Edward Lambert Department of Conservation and Recreation Office of Public Outreach 251 Causeway Street, Suite 900 Boston, MA 02114

Via Email: <u>DCR.Updates@state.ma.us</u>

Re: Science and Technical Advisory Committee Report

Dear Commissioner Lambert:

On behalf of Mass Audubon, I submit the following comments on the Department of Conservation and Recreation (DCR) Division of Water Supply Protection (DWSP) Science and Technical Advisory Committee (STAC) report, *Review of the Massachusetts DWSP Watershed Forestry Program*, November, 2012.

Water quality at Quabbin Reservoir and the other parts of the DWSP water supply system is vital, as it provides drinking water to 2.2 million people in Massachusetts. A critical factor supporting the high water quality within the system is that over half of the land within the watersheds draining into the Ouabbin and Wachusett Reservoirs is permanently protected from development. The Commonwealth Department of Conservation and Recreation's (DCR) Division of Water Supply Protection (DWSP) is responsible for managing over 105,000 acres of these protected watershed lands. In addition to forestry, DWSP engages in many other important aspects of watershed management, both on DCR land and in support of community and landowner initiatives to protect water quality, including land use regulation, stormwater and wastewater management, and deterrence of potential wildlife sources of contamination such as gulls. The STAC report offers several recommendations for refinement of the DWSP forest management program. In response to the STAC report, Mass Audubon offers the following comments. We note in particular the need for increased attention to and an effective plan for management of invasive non-native species of plants, to enable continued regeneration of native plants that form the protective forest on the watersheds. We also support further monitoring to compare managed and unmanaged areas of the watersheds over the long term, and ongoing public engagement in watershed land management policies, plans, and practices.

Mass Audubon has a longstanding history of advocacy in support of land protection around the Quabbin, Wachusett, and Ware River watersheds. Forests covering the land are the primary means of protecting water quality. Mass Audubon supported the state's successful efforts to rely on this natural buffer as the basis for a waiver from federal requirements to construct an expensive filtration facility. Careful management of watershed lands is important for water quality protection. Mass Audubon has been involved in discussions and reviews of management plans and policies for the watersheds for several

decades, including participation by Mass Audubon staff members in the STAC, Quabbin Watershed Advisory Council (QWAC), and Ware River Watershed Advisory Council (WRWAC). Tom Lautzenheiser, Mass Audubon's Central/Western Regional Scientist, is a member of the STAC. He attended two of the STAC meetings and provided comments to the STAC chairman as several points in the STAC review process. This opportunity for involvement in the STAC process is appreciated. This Mass Audubon staff involvement should not be construed to imply endorsement of every detail of the resulting report or DCR's management practices. In fact, Mr. Lautzenheiser did not endorse the STAC report despite his participation on the committee, primarily due to reservations with certain aspects of the report's content.

That said, Mass Audubon generally supports the DWSP 2007-2017 Quabbin Land Management Plan, which, along with the management plans for the Wachusett and Ware River watershed lands, are the result of extensive and thoughtful work by many individuals within and outside the agency over a period of decades. The issues addressed and approaches applied continue to evolve with each iterative update of these plans. There is always room for improvement and refinement as well as challenges in implementation, and we appreciate DCR's ongoing engagement with experts and the public to continually improve watershed management.

The following comments reflect Mass Audubon's perspectives on the topic and suggestions for next steps. It is our understanding that DCR intends to produce draft recommendations for further refinement of the management plans in response to the STAC report, and that there will be additional opportunities for public input. We also encourage DCR to continue to engage with the STAC or other experts as it grapples with particular management challenges facing the watershed lands. We look forward to continuing our participation in support of sustainable management of the watershed resources.

Specific Comments

Forestry Policies and Practices: In general, Mass Audubon is supportive of the DWSP's forestry policies and practices. While the selection of sites, execution of specific projects, and other details can be the subject of legitimate debate, monitoring data indicate that the overall approach does not measurably impair water quality, the key indicator in this system. The likelihood of a catastrophic disturbance event affecting a significant enough portion of the watershed to impact water quality is uncertain at any particular point in time. However, this risk is likely increasing due to climate change, and the concept of a diverse, multi-aged forest with advance regeneration as a means of providing resilience is sound, relative to the watersheds' even-aged forest stands that have typically experienced decades of intense deer herbivory. The management plan includes limitations on forestry operations within sensitive areas, including buffer strips along the reservoirs, tributaries, and wetlands, as well as on the amount of any subwatershed that can be altered at any time. The plans also include many other protective guidelines. Taken together, DWSP's forestry operations appear to be appropriately responsive to many of the risks associated with active forest management.

In the mid-1990s, Mass Audubon advocated for the application of a BioReserve approach to management of the watershed lands at Quabbin. The STAC report references this proposal but does not adequately or accurately reflect the concept put forth by Mass Audubon at that time. We did not advocate for a complete "hands-off" management of the Quabbin watershed, but rather an ecologically-based approach to management that would develop a multi-aged forest including areas with old growth characteristics over time. Further, the proposal was offered as a testable hypothesis, to be rejected if the primary management concern—protecting the public water supply—was not adequately met through its implementation. In some respects, this BioReserve proposal is not so different in overall concept from the multi-aged management approach in DCR's current management plan. The differences are a matter of active management's extent, duration, and degree of intensity, as well as details of management techniques applied, but the overall goal is similar: a resilient, diverse forest that protects the quality of the

water supply while supporting many native species of plants and animals. The STAC report's Chapter 4 presents an evaluation of the active versus passive management approach, but the argument presented ignores valid questions at the heart of the debate. Such questions include risks associated with active management, such as the potential for harvest activities to increase a forest's susceptibility to certain disturbances, and also the idea that disturbance events in mature forests may not pose as high a risk to water quality as commonly understood¹. In this regard, the STAC process fell short of a full evaluation of some key questions of science related to watershed management principles, and yet the building blocks are in place for continued explorations of these issues.

The STAC report recommends that forestry operations be reinitiated, with some revisions. Mass Audubon supports these recommended refinements, including selecting locations and layout for clearings based on ecological considerations and natural features rather than geometric patterns. Mass Audubon's *State of the Birds of Massachusetts* report (www.massaudubon.org/StateoftheBirds/) and MassWildlife's Wildlife Action Plan for the state both identify the need for increased management of land for early successional birds and other wildlife. Careful site selection, project design, and operation are important when clearing forest areas to protect both water quality and ecological values. It is also important that invasive plants be managed, before, during, and after forestry operations.

The STAC recommendations also suggest that specialized thinning techniques be considered on the other end of the spectrum of forestry techniques, in order to facilitate more rapid development of old growth characteristics. Mass Audubon supports this recommendation and encourages DCR to follow through in implementing these techniques. Again, site selection is important – some locations are better suited to this approach, while others may be more appropriate for patch cuts. It would be helpful if DCR could provide maps indicating general areas proposed for potential application of the different methods over the next 5-10 years in a manner that would better enable an understanding of particular forestry projects in relation to the overall watersheds. We also recommend that DCR gather further public input on both the overall program for the next 5 years and specific projects before they are put out to bid.

<u>Invasive Species</u>: The STAC report acknowledges concerns regarding the potential for forestry operations to facilitate the establishment and spread of invasive species. Mass Audubon urges DCR to examine this issue in greater detail and to produce an Invasive Species Management Plan for the watershed. The existing Quabbin Management Plan acknowledges the need for such a plan. We encourage DCR to produce a draft plan and circulate it for public input. The invasives management plan should include plans for curtailing, and if possible reducing, the substantial existing stands of certain invasive plants, such as Oriental bittersweet, Japanese barberry, and glossy buckthorn, on some areas of watershed lands. Populations of these species, among others, are actively displacing and/or inhibiting the regeneration of native plants. Over the long term, the continued persistence and further spread of these plants could threaten the integrity of the diverse, multi-age native forest that is so central to DCR's goal for protection of the water supply.

Monitoring and Adaptive Management: The active management approach applied to watershed lands remains an untested hypothesis, and a strengthened monitoring program is a critical step toward its evaluation. Mass Audubon recommends that DCR further enhance its watershed monitoring program for use in applying adaptive management principles, and that additional attention be paid to the potential interaction between invasive plant species, forestry operations, and goals for maintaining a diverse ecosystem comprised primarily of native species. Importantly, the monitoring program must also include areas that are not being actively managed. We also support continued management of wildlife such as

rests: when doin

¹ For example, as presented in Foster, D. R. and Orwig, D. A. 2006. Preemptive and salvage harvesting of New England forests: when doing nothing is a viable alternative. Conservation Biology 20(4) 959-970.

deer in a manner that is consistent with ecological management principles and supportive of the forest conditions desired for water quality protection.

Land Protection and Sustainable Development: Mass Audubon supports DCR continuing its ongoing program of land acquisition with prioritization of lands in particularly vulnerable areas of the watersheds. We also support DCR's ongoing engagement with landowners through the Watershed Management Act review of projects in close proximity to tributaries as well as voluntary education and assistance work. DCR has supported efforts by watershed communities to update land use plans, zoning, and regulations to promote more sustainable forms of development within the communities while meeting local needs for economic development and housing. We encourage DCR to continue those efforts in collaboration with other agencies, landowners, municipalities, and private groups. Mass Audubon has a sustainable development initiative through our *Shaping the Future of Your Community* outreach and assistance program, and we note that we offer many tools, techniques, and sources of information on our website at www.massaudubon.org/shapingthefuture.

Thank you for considering these comments, and for the opportunity for Mass Audubon staff to participate on the STAC, QWAC, and WRWAC.

Sincerely,

Jack Clarke

Director of Public Policy and Government Relations

cc: Jonathan Yeo, Director DWSP

ho for

Peter Church, DCR Director of Forest Stewardship

DFG Commissioner Mary Griffin

From: Stephen Kaiser [mailto:skaiser1959@gmail.com]

Sent: Friday, January 18, 2013 5:01 PM

To: Updates, DCR (DCR)

Subject: PROTECTING QUABBIN : the STAC Report & Recommendations for Watershed Protection

Lands

To: Commissioner Edward M. Lambert, Commissioner, DCR

As Commissioner of DCR, in combination with Secretary Sullivan, you will have the ultimate responsibility for decision, with regard to any changes made in logging and clear-cutting policies on DCR lands and in particular on Water Supply Protection lands. I hope that you will apply the conclusions of the STAC report prudently. Our goal should be a general public having full confidence in the professional management of the extraordinary lands represented by Quabbin, Wachusett, and other watersheds.

The STAC report properly identifies the undesirable effects of the patch cuts at Quabbin. This type of work is unsightly, disturbing to the general public, and serves no purpose to protect the values of the Quabbin watershed. The same criticism applies to clear cuts at the Wachusett Reservoir.

The report on page 69 identified the "increasing of diversity, ages and species" as a desirable and "inherently conservative approach to restoring natural conditions to the forests and protecting forests from the effects of hurricanes, insects and diseases. Clear cuts create localized even-age growth, dominance of single species and an increased potential for invasive species.

Only one practical purpose can be identified for the change to clear-cutting and away from the MDC/DCR tradition of more careful and selective thinning. That purpose is providing economic gain for the private forestry interests in the region. Such an advantage has previously been claimed in an adulatory PowerPoint presentation by DWSP staff a few years ago. Such private economic gains are an inappropriate and illegal use of public lands.

The STAC report urges a shift in focus for watershed protection, so that enhanced conservation easements may be sought to encourage better management of private forests. I urge that this goal be a positive and away from the negative distractions caused by the past DWSP clear-cutting policies.

During the Forest Futures study, a detailed report and identification of relevant laws and regulations was made by a lawyer-member of the advisory committee. Unfortunately, the implications of the laws could not be reviewed within the time and funding available, but one key element included was Article 7 of the Declaration of Rights of the State Constitution, which reads:

"Article VII. Government is instituted for the common good; for the protection, safety, prosperity and happiness of the people; and not for the profit, honor, or private interest of any one man, family, or class of men"

A common good must be -- but has not been -- identified for the clear-cuts. DCR actions representing the state government must be consistent with the limitations specifically imposed on any profits for special private interests. Allowing commercial logging on state lands designated for water supply protection is not consistent with a requirement to identify a proper public purpose, namely the common good, and fails to comply with prohibitions against profit-making by private special interest groups as a direct result of government action. DCR and its division responsible for protecting water lands of the the Department would be well advised to adopt and obey policies which prevent profit-making on water supply protection lands. If they do so, they will be in full compliance with the requirements of Article 7.

The STAC report on page 70 notes the goal to "restore the trust and confidence of the public, regulatory agencies and policy makers in the DWSP." I agree that by changed policies we should be able to restore the confidence that existed in previous years. In past years, the former MDC and DCR treated the land with the respect that it deserved. The current DCR should do the same and restore Quabbin to a category of sacred land that is the gem of environmental protection and engineering achievement in our Commonwealth.

For four decades the management and protection of Quabbin was the local responsibility of Bruce Spencer of the MDC, and I am unaware of any complaints of clear cutting and other damage to the watershed during the years of his leadership. Negative concerns have arisen only since his retirement. The solution is to identify the proper environmental protections Mr. Spencer applied and make those the new DCR policies, and to abandon any newer policies which gave priority to the profits and job production of logging interests.

The guidance of the STAC report is sufficient positive and authoritative that any questionable actions in the past can simply be lessons to be learned and do not need to be a cause for additional friction if it can be avoided. However, I would hope that the letter of February 13, 2012 from Jonathan Yeo, Director of DWSP, should be voided, and in the future the voice of the DCR on Water Supply Protection should be that of the Commissioner of DCR.

I am well aware of the concerns of the MWRA Advisory Board with respect to even small reductions in income to moderate water and sewer payments from municipalities. Mr. Favaloro has made made his interests clear, and I have identified my differing views clearly. We both agree that the STAC report will provide definitive guidance.

From an MWRA perspective, the dispute over protections of MWRA lands has provided a distraction from the more pressing issue, which is the extraordinary debt of the MWRA. I am not aware of any government operation that has a higher percentage of debt service in its annual budget, now exceeding 60 percent -- not since the period of the Civil War when the Union cause was funded during the 1862 to 1865 period by borrowing that consumed as much as 91 percent of the annual national budget. By good fortune, our nation survived the debt burdens of that terrible war, and paid off almost the entire debt.

We should return Quabbin to a more natural and less threatened state, and meanwhile focus our concerns on the debt situation which hangs over one of our best state agencies, the MWRA.

Stephen H. Kaiser Mechanical Engineer 191 Hamilton Street Cambridge, Mass. 02139