STATE OF VERMONT

ENVIRONMENTAL COURT

Secretary, Vermont Agency of Natural Resources, Plaintiff,	}	
	}	
v.	}	Docket No. 166-8-02 Vtec
	}	
Thomas L. O' Brien and Nancy J. O' Brien, Respondents.	}	

Decision and Order

On July 8, 2002, the Secretary of the Vermont Agency of Natural Resources (ANR) issued an administrative order pursuant to 10 V.S.A. § 8008 regarding Respondents, who timely requested a hearing in Environmental Court. Respondents are represented by Jack Long, Esq.; and the Secretary of the Agency of Natural Resources is represented by Gary Kessler, Esq. When used in the singular, ' Respondent' refers to Thomas O' Brien.

The Court extended the time for the hearing for good cause at the request of and by agreement of the parties, to accommodate the schedules of the parties and to allow discovery.

The statutes, rules and permits applicable to this matter are 4 V.S.A. Chapter 27; 10 V.S.A. § § 1082, 1259(a) and 1264; 10 V.S.A. Chapter 201; and § § 6.3 and 8 of the Vermont Wetland Rules. 10 V.S.A. § 8012(c).

Findings

Respondents own a 350-acre parcel of land on the side of a mountain off West Jamaica Road in Jamaica, Vermont. The property contains a Class II wetland mapped on the National Wetlands Inventory Map, located near the house site, and Class III forested wetlands located down the mountain closer to Ball Mountain Brook. Drainage down the side of the mountain is generally through unnamed tributaries to Ball Mountain Brook. Prior to the events in this case, the unnamed tributaries and Ball Mountain Brook were high or ' reference' quality Class B waters.

Respondents began site work on the property in 1999 in connection with building a house and garage. In the spring of 2000, Respondents had work done on the property in connection with enlarging the open water area of a pond and wetland complex near the house site (the upper pond), clearing an area for placement of the material dredged from the pond, grading the areas around the pond, and doing other landscaping and site work on the property. The house and garage site is on a high point up the side of the mountain, with views extending to the northeast. A small ' saddle' of land to the southeast of the house site separates the slope of the mountain side from a large area of wetlands to the southwest of the house site, including a small beaver pond, that drains via neighboring property in a southwesterly direction.

Peatland is a type of wetland with conditions that allow for the accumulation of partially decomposed organic matter or peat slowly to form an organic substrate on which plants can grow. This decayed organic matter is called peat or muck depending upon the level of decomposition. Peatlands develop extremely slowly, as the organic matter decomposes very slowly, so that at this latitude they may develop twenty or thirty feet deep over a period of ten thousand years. Technically, they are called ‘ bogs’ or fens’ depending on the level of decomposition.

Prior to the events in this case, the wetland and small pond complex was boggy and had a ‘ mucky’ bottom, and contained extensive floating mats of sphagnum plants or peat. Based on an examination of the types of plants in the stockpile of material removed from the pond, the top six inches to a foot, accumulated over the last five hundred years, was sphagnum moss and bog heath plants, above a large amount of sedge (wetland grass) peat below. The basin was about 4½ acres in extent of which approximately a half acre was open water. It was an upland fen in relatively pristine condition and represented one of approximately only twenty such fen communities in the entire state. It would have qualified under the natural resources heritage program for recognition in the second rarest of five categories, as a rare plant community or ecosystem.

Respondent sought in general to use local contractors in the construction work on his property. Respondent discussed with his excavating contractor David Chaves, who had built the long roadway or driveway up the mountain to the house site, the possibility of clearing out the upper pond to enlarge the amount of open water, as well as the construction of a new pond lower down on the property. The lower pond was constructed and is about two acres in area. In a tax appraisal, the lower pond added about $10,000 to the overall value of the property.

Respondent discussed with his contractors his plans to clear out the upper pond to enlarge the amount of open water and to increase the depth of the water in the pond to about 2 feet to allow the over-wintering of fish. He planned to use the open water area of the ponds on his property to train Labrador dogs for field trials. He was quoted an estimate by his logging contractor to ‘ muck out’ the pond, but the logging contractor recommended that the excavation contractor, Mr. Chaves, do the work.

In the course of Respondents’ conversations with both contractors about whether to contact state regulators for approval of the prospective work at the upper pond, neither one specifically said outright that state permits were required for this work, or that state permits were unlikely to be granted for this work, but they told Respondent that he could “ call the state or just go ahead” with the work. When he asked them when they could start on the work, they would hesitate and tell him that he could put it off and contact the state to see if permits were required. When he asked what would happen if he called the state, they told him that contacting the state would seriously delay the project. When he asked them what they would do, they told him they wouldn’ t want to get the state involved, but just to deal with problems as they arose. The logging contractor suggested starting with the higher eastern side of the pond because they were less likely to ‘ get caught.” After the work was begun, Respondent told the contractors that he would be responsible for any problems with the state, including penalties, resulting from the work.

Respondent chose to disregard the fairly clear implications of these discussions that without contacting the state and applying for any required permits, the proposed work would be illegal. Even if the contractors did not state outright that permits were required, it was not reasonable for him as the landowner directing the pond work to rely on them to " keep him out of trouble," because they had a financial interest in keeping him happy by accomplishing the result he wanted. Respondent chose to close his eyes to the issue of whether prior permits were required, and to the problem that the work might not qualify for the permits if they were applied for. At the time, he had a limited understanding (or what he characterized as a ' one-dimensional' view) of both the law and the science of wetlands, mistakenly thinking that enlarging or deepening a pond would result in ' no net loss' of wetlands, and mistakenly thinking that this was a standard applicable under state law. Before commencing the work, he did not seek to determine whether any permits were required to do any work in the upper pond wetlands complex or to drain the pond down the side of the mountain, did not direct the contractors to do so, and did not engage the services of any engineering or wetlands professionals to evaluate the feasibility or the legality of the project, to apply for any permits, or to institute any protective measures such as erosion controls in advance of the work. The work intended for the pond would not have qualified for a permit (Conditional Use Determination) under the State wetlands program. The serious erosion and runoff down the side of the mountain into the tributaries of Ball Mountain Brook and the lower forested wetlands would not have received approval under any program.

During the dredging and grading of the upper pond hundreds of truckloads of peat were removed and approximately 2.3 acres of peatland was destroyed. A peat fen such as this one formed over thousands of years and cannot be artificially restored completely to its original state. While the sphagnum moss that creates peat will re-root along the margins of the pond, it takes a very long time for the floating mats of peat to form which create the bog conditions. Artificially-created floating rafts can be installed and planted with sphagnum moss, but they will not create the long-lived equivalent of the natural floating mats of peat. Once dredged, the peat material cannot be returned to fill in the pond, because chemicals such as tannins bound up in the peat will be released and will discharge to the stream outlet of the pond.

After the events in this case, the condition of the wetlands and pond complex was that the pond had been dredged and that the shore of the pond had been disturbed and the wetlands and shore plants had been removed from the easterly margin around the north side of the pond to the northwesterly margin. In a band of approximately six to ten feet in from the pond edge along the disturbed perimeter, the peat and other organic material had been removed from the pond bottom down to the mineral soils. While the peat community cannot be reestablished or restored to the condition it was in before the work was done, the disturbed margins within the pond can be filled in or graded to a shallower depth, as discussed in the next paragraph, and replanted with wetland species. A fifty-foot buffer around the pond and wetland complex can be replanted with facultative[1] and uplands species. Wetlands (or obligate) species will not survive in upland conditions.

Mineral soil can be placed in the pond near its edges in any areas within the pond where mineral soils are exposed, to create a shallow shelf or slope suitable for the planting of wetlands grasses and other plants to restore the wetlands vegetation. If conditions suitable for the formation of peat are present, this vegetation ultimately will decay to create peat some hundreds of years into

the future. Although in some situations, a shallow area of a one-to-ten slope can be created by ‘ pulling back’ or further excavating the pond edge and filling in the water near the edge, in the present case it would not be good engineering practice to cut or disturb the saddle of land at the northeast edge of the pond, as there is a risk that it would fail or erode and cause another catastrophic discharge down the mountainside. Heavy machinery should not be brought to the pond site over the saddle of land for the same reason. It may be possible to create a shallower area within the pond by this method on the easterly disturbed area, as long as it is done without the use of heavy machinery brought to the site over the saddle of land.

The pond was dredged in places to a depth of ten to twelve feet. Respondent estimated that its average depth was three to five feet; Respondent' s contractor estimated that its average depth was seven feet. Even using the most conservative of Respondent’ s own estimates of the pond depth after the dredging yields a volume for the 4½ -acre pond of 595,350 cubic feet, exceeding the jurisdictional requirement that the pond be capable of impounding over 500,000 cubic feet of water. Respondents enlarged the pond by dredging out the bottom.

To accomplish the dredging and enlargement of the upper pond, Respondent agreed with his contractor that the contractor should drain the pond temporarily to allow the dredging work to occur, channeling the water down an existing logging road that had already eroded several feet below the surface of the surrounding land. The saddle of land to the southeast of the house had acted as a natural dam to create the pond impoundment and otherwise to separate the pond from the Ball Mountain Brook drainage system. The contractor breached this saddle of land to drain the water from the pond in order to remove material from the pond bottom.

The sudden drainage of the large volume of water from the pond through the breach in the saddle of land caused a catastrophic ‘ blow-out,’ resulting in serious erosion and in significant discharges of eroded material into small unnamed tributaries of Ball Mountain Brook, into Ball Mountain Brook, and into its associated lower wetlands, all of which are waters of the state. In connection with later remedial work, the sediment was removed by hand from the lower wetlands by a work crew hired by Respondent.

The sediment in the tributaries and in the brook caused a reduction in species diversity and health of the stream, degrading it below its Class B status as of June of 2000, and damaging fish habitat by clogging up the gravel substrate with the sediment. The erosion was severe and should have been anticipated, as the soils below the saddle of land are extremely erodable. In response to the Agency' s initial investigation, Respondent merely told the contractor to install erosion controls. Because the contractor’ s efforts to install the controls were not directed by an engineer, they were not only unsuccessful, but because he did not stop work on the pond dredging project, his efforts exacerbated the erosion. After an emergency order was issued on June 1, 2000, Respondent was cooperative, hired an engineer, developed a successful erosion control and remediation plan for the discharge violation, and had the plan carried out. The work included the removal by hand of the sediment deposited by the erosion and discharge and was completed by late fall of 2000. Once further erosion was prevented and the sediment was removed so that no additional sediment could reach the streams in future storm events, the streams began to recover. Unlike the wetlands violation, the discharge violation could be and was remedied, and so had a duration of approximately six to eight months.

The saddle of land that had been subject to the ‘ blow-out’ , and the soils below it down the mountain, are composed of extremely erodable soils that remain at risk for erosion if again exposed to a great rush of water. If the pond must be drained in the future, it would be preferable from an engineering point of view to drain it through the natural pond outlet to the southwest on the neighbor' s property. If it had to be drained over the saddle of land, it should be done through a pipe that had its outlet much farther down the slope, beyond the steepest, most erodible soils. It could be drained into the lower pond temporarily. From an engineering standpoint, it would be possible but expensive to place a coffer dam in the pond to enable the removal of water from a portion of the pond to allow work on the bottom.

If mineral soils or sands are placed on top of a depth of peat, chemicals sequestered in the organic matter can be squeezed out and released into the pond water, and could discharge through the outlet to the stream system. The remaining peat and muck in the pond has not been tested to determine if there would be a risk of discharge if material were to be placed on the remaining peat in the pond.

One intended result of the remedial work or restoration plan is to speed up restoration and regrowth of the wetland and floating peat islands and the fen peatland community. Another intended result is to eliminate the potential for use of the dredged pond for swimming or any other recreational use that would not have been possible in its original state.

Respondent expended approximately $175,000 in conducting the illegal work, that is, towards the creation of the pond. Respondent expended approximately $72,231in remedial work on remedying the discharge violation, including $35,481 on engineering, $19,000 on silt removal in the lower wetlands, and $17,750 on carrying out the erosion control plan, including seeding and mulching. Respondent has also expended money towards consultants’ work on preparing a remedial plan for the wetland and pond violations. These remedial expenditures are exclusive of attorneys’ fees, which are not, properly speaking, remedial costs.

The creation of the two-acre lower pond, distant from the house and therefore less of an amenity, increased the property valuation by $10,000. A new 4½ acre pond in the location of the upper pond as opposed to a bog in that location, would increase the property’ s raw land valuation by $46,500. Therefore a change from wetlands to pond status of about 2.3 acres of the existing pond would result in an increase in value of Respondent’ s property by approximately $23,000.

Respondents have expended approximately $1,500,000 in connection with this property, including the land acquisition, site work and house construction, and have an annual income of at least $250,000.

Conclusions as to Violation (10 V.S.A. § 8012(c))(1)):

The statute requires this Court to determine whether a violation has occurred, 10 V.S.A. § 8012(b)(1), independently of reviewing and determining anew a penalty amount. 10 V.S.A. § 8012(b)(4). At trial, Respondent Thomas O’ Brien admitted three of the four violations: 10 V.S.A. § 1259(a) (discharge to waters of the state without a permit); Vermont Wetland Rules

§ 6.3 and § 8 (dredging, ditching and draining of a wetland without a Conditional Use Determination); and 10 V.S.A. § 1264 (discharge of stormwater runoff from a construction site without a permit). Therefore, we only here address whether a violation of 10 V.S.A. § 1082 also occurred.

Even using the most conservative of Respondent' s own estimate of the pond depth yields a volume for the pond of 595,350 cubic feet, exceeding the jurisdictional requirement that the pond be capable of impounding over 500,000 cubic feet of water. Respondents enlarged the pond by dredging out the bottom, and the work therefore fell within the requirements of this section even if the breach and catastrophic discharge had not occurred. In addition, although they did not intend to permanently alter the saddle of land that created the impoundment, they did in fact breach the saddle of land that was the dam for this impoundment, and therefore fell within another clause of this section as well. Accordingly, we determine that the work at issue in this case was also a violation of 10 V.S.A. § 1082 (alteration of a pond and breach of a dam capable of impounding more than 500,000 cubic feet of water).

Determination of Order and Penalty (10 V.S.A. § 8012(c))(3)):

The Administrative Order against Respondents contains no specific remedial provisions. other than the three requirements in Paragraph D that must be addressed in a proposed restoration plan. Rather, it requires Respondents to submit the names of three qualified wetlands consultants to the Agency for review and approval, to hire one of the approved consultants, to have the consultant draft a written Comprehensive Restoration Plan for the site, and to carry out that plan once it is approved.

Paragraph D requires the Comprehensive Restoration Plan to include provisions for the following three components which are at issue in this proceeding: 1) " Draining the pond to a level to allow a 1 to 10 slope to be created around the perimeter;" 2) " Placing material to create the desired slope and to do so in a manner to prevent additional discharges;" and 3) " Re-vegetating the new slope and the surrounding 50-foot buffer area with native wetland species including peat communities where possible." Paragraph E requires the consultant to amend the plan to conform to the " review comments" made by the Agency' s Wetlands Section.

While both parties agree that the Court cannot rewrite these remedial provisions, the Secretary asks the Court to ' interpret' them to mean that the only portion of the perimeter requiring the work is the disturbed perimeter; that if drainage is not feasible it may be possible for the Agency to approve placement of soil to create a shelf on the exposed mineral soil areas within the pond to make the water shallow enough for wetland plantings; and that the wetland should be revegetated with wetland species but the surrounding 50' buffer should be revegetated with facultative and upland species.

All of these suggested ' interpretations' are reasonable, and could easily have been changed at any time prior to or even during trial by the Agency' s motion to amend those provisions of the order, or even by the issuance of a revised administrative order that could have been consolidated with this one. But the Court simply does not have the authority to change these remedial provisions in the way sought by the Agency. The legislature specifically and intentionally

required any remedial order provisions to be sent back to the Agency to be changed or interpreted, to avoid the Court' s substituting its understanding of the scientific disciplines involved in any given case for that of the Agency experts trained in those disciplines.

Paragraphs D and E of the July, 2002 Administrative Order must be vacated and remanded because the procedure contained in paragraphs D and E, including the extent and nature of the components of any restoration plan, and the standards by which the Agency determines whether to approve any restoration plan proposed by Respondents, is not reasonably likely to achieve the intended results. In particular, the slope or shallow water area suitable for replanting should be created only within the disturbed perimeter, to avoid further unnecessary damage to the wetlands complex. The feasibility of drainage and pulling back the edge or the alternative of placement of a shelf of soil on the exposed mineral soils bed from the edges to approximately ten feet within the pond, should be assessed for the different segments of the disturbed perimeter, to avoid any risk of another catastrophic discharge that could result from work in or damage to the remaining saddle of land. The revegetation of the wetland with wetland species, including peat communities where possible, and the revegetation of the 50-foot buffer with facultative and upland species should be incorporated into the plan, to avoid the introduction of inappropriate species. In connection with the revegetation of the wetland, the feasibility should be assessed of installing artificial floating mat surfaces on which sphagnum or other appropriate species could grow, to restore the former proportion of open water surfaces. 10 V.S.A. § 8012(b)(2).

In addition to addressing the remedial provisions, the Court must review and determine anew an appropriate penalty amount for the violations by applying the eight criteria set forth in 10 V.S.A. § 8010(b). 10 V.S.A. § 8012(b)(4). In the Administrative Order the Secretary imposed a penalty of $85,000 for the four violations. In this proceeding the Secretary has requested a penalty of $100,000 for the wetlands violation as a continuing violation, plus an additional $40,000 for the discharge and construction runoff violations, plus an additional $2,500 for the pond enlargement permit violation, for a total of $142,500 now requested by the Secretary. We do not review whether the Agency' s system for calculating penalties yielded a fair or consistent result, because the assessment by the Court is de novo.

First we must note that for a civil penalty to withstand constitutional scrutiny, it must be basically remedial in effect, rather than punitive. The methodology inherent in the statute and applied by this Court is to remove the economic benefit gained from the violation, in order to carry out the statutory purpose of preventing the unfair economic advantage obtained by persons who operate in violation of environmental laws, 10 V.S.A. § 8001(2) and § 8010(b)(5), and then to apply the remaining statutory factors to determine what additional penalty is needed, or whether mitigating factors should reduce any element of the penalty. That is, the entire economic benefit first must be removed to carry out a primary purpose of the Uniform Environmental Enforcement Act: to make it less expensive to comply with the law than to violate it.

We take each of the penalty factors in turn. The economic benefit to Respondents for the violations was approximately $23,000 as measured by the additional value of the property from a larger pond area, plus the avoided costs of making the permit applications that were not made. No evidence was presented on those avoided costs. Respondents have spent approximately three times that amount on remedial work on the discharge violation to counter the benefit, even if the

pond were to remain in its enhanced condition. However, the remedial work still to be done on the pond and wetland complex, to restore it to the percentage of open water and the condition along its shoreline as nearly as possible to its prior condition, will remove this economic benefit entirely.

Substantial long-term actual environmental harm resulted to the peat fen wetlands complex from the wetlands and pond dredging violations. Substantial actual but shorter term harm resulted to the tributaries to Ball Mountain Brook, to Ball Mountain Brook and to the lower forested wetlands from the discharge and construction site violations. Unfortunately, such harm is difficult to assess economically, and no evidence was presented on that point to assist the Court in linking the serious environmental damage with the proposed penalty amount. The Court will assess a substantial component of the penalty to acknowledge, if not to completely account for, the environmental harm. § 8010(b)(1).

In the present case Respondent' s cooperation after the emergency order was issued, and his willingness to undertake extensive and expensive remedial work since that time, is a mitigating factor. § 8010(b)(2). Respondents, however, should have known or should have reasonably been put on inquiry that all of the intended work was illegal without prior permits and was unlikely to have been approved. § 8010(b)(3).

Respondent has no prior record of non-compliance. § 8010(b)(4). The Secretary does not seek actual costs of enforcement in the present case. § 8010(b)(7). The duration of the discharge violations was relatively short: about six to eight months in duration. The duration of the wetlands and pond violations is relatively long, as no amount of remedial work will be able fully to restore them to their previous pristine state. § 8010(b)(8).

With regard to considerations of deterrence, the Secretary requests a substantial penalty so that it will be have a deterrent effect on Respondents, who enjoy a relatively large income and own a large and valuable tract of Vermont property. § 8010(b)(6). Even given that fact, in the present case the amount of penalty due to the other factors, in particular that of environmental harm, together with the amounts expended and to be expended by Respondents on remedial work, will have an adequately deterrent effect.

Accordingly, taking all these factors into account, the Court will impose a penalty for both discharge violations of a total of $25,000, in recognition particularly of the environmental harm and the fact that Respondents knew or should have known that this work should not have been commenced without state review and indeed would not have been allowed, but recognizing Respondents' effective remedial work and expenditure of approximately $72,000 to remedy the discharge violation.

Also taking all these factors into account, the Court will impose a penalty for the wetland violation of a total of $50,000, in recognition particularly of the irreparable environmental harm and the fact that Respondents knew or should have known that this work should not have been commenced without state review and indeed would not have been allowed, and recognizing that Respondents will have to expend considerable amounts on the development and execution of an appropriate remedial plan for the wetlands violation in the future.

Also taking all these factors into account, the Court will impose a penalty for the pond violation of $5,000. This penalty avoids double-counting of any factor considered in the other violations, but recognizes that if Respondents had applied for a permit to breach the saddle of land, which would have been denied, the discharge violation could have been avoided, and if Respondents had applied for a permit to enlarge the pond, which would have been denied or at least referred to the Wetlands Section, the wetlands violation would have been avoided.

Based on the findings, conclusions, and reasoning of this decision, it is hereby ORDERED that:

Paragraph A of the July 8, 2002 Administrative Order is vacated. On or before January 1, 2004, Respondent shall pay a penalty of $80,000 to the State of Vermont, to be deposited in the general fund pursuant to 10 V.S.A. § 8010(e).

Paragraph B of the July 8, 2002 Administrative Order is affirmed.

Paragraph C of the July 8, 2002 Administrative Order is modified to add the following sentence, and as modified is affirmed: Reasons shall be stated for disapproval of any of the proposed consultants, and Respondent may apply to the Secretary for review of any such decision under the Agency' s administrative procedures.

Paragraphs D and E of the July, 2002 Administrative Order must be vacated and remanded, as violations were found to exist, but the procedure and requirements contained in paragraphs D and E, as discussed above, are not reasonably likely to achieve the intended result. The question of whether any elements of the plan already proposed by Respondents should be revised, augmented, modified, or approved or disapproved by the Agency, is open to be addressed by the Agency in the course of its work after remand.

Paragraph E of the July 8, 2002 Administrative Order is affirmed.

Paragraph F of the July 8, 2002 Administrative Order is modified to add the phrase " or as soon thereafter as the growing season will allow," after the opening phrase: " Within sixty consecutive calendar days. . . ." As modified it is affirmed.

Paragraph G of the July 8, 2002 Administrative Order is modified to add the phrase " or as soon thereafter as the growing season will allow," after the phrase: " no later than twenty consecutive calendar days. . . ." As modified it is affirmed.

Paragraphs H and I of the July 8, 2002 Administrative Order are affirmed.

Any party wishing a separate V.R.C.P. 58 judgment order may propose one for the Court' s signature so that it is received by the Court on or before November 26, 2003; otherwise it will be deemed to have been provided by the above paragraphs modifying the Administrative Order, as required by 10 V.S.A. § 8012(b).

Rights of Appeal (10 V.S.A. § 8012(c))(4) and (5)):

WARNING: this decision will become final if no appeal is requested within 10 days of receipt of this decision. Respondents and the Secretary of the Agency of Natural Resources have a right to appeal this decision. The procedures for requesting an appeal are found in the Vermont Rules of Appellate Procedure (V.R.A.P.) subject to the exceptions in Vermont Rules of Civil Procedure (V.R.C.P.) 76(a)(3) and (d)(5). Within 10 days of receipt of this Order, any party seeking to file an appeal must file the notice of appeal with the Clerk of this Court, together with the applicable filing fee. Questions may be addressed to the Clerk of the Vermont Supreme Court, 111 State Street, Montpelier, VT 05609-0801, (802) 828-3276. An appeal to the Supreme Court operates as a stay of payment of a penalty, but does not stay any other aspect of an order issued by this Court. 10 V.S.A. § 8013(d). A party may petition the Supreme Court for a stay under the provisions of V.R.C.P. 62 and V.R.A.P. 8.

Done at Barre, Vermont, this 6th day of November, 2003.

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Merideth Wright
Environmental Judge

Footnotes

1. Under the terminology used regarding wetlands vegetation, 'obligate' species need wetlands conditions to grow; while 'facultative' species are found in wetlands and the nearby uplands.