



Londonderry Open Space Task Force
Tuesday, December 2, 2010
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1 **Present: Mike Speltz, Chair and Conservation Commission Representative; Dana Coons, Vice Chair and**
2 **Planning Board Alternate Representative; Lynn Wiles, Secretary and Planning Board Representative;**
3 **Art Rugg, Heritage Commission Representative; Bill Manning, Recreation Commission Representative;**
4 **Marty Srugis, Solid Waste Advisory Committee Representative; Jeff Locke, At-Large Representative;**
5 **and Tim McKenney, At-Large Representative**

6
7 **Also present: John Vogl, GIS Manager; and Jaye Trottier, Administrative Assistant**

8
9 **Absent: George Herrmann, School Board Representative; John Curran, Budget Representative; Lisa**
10 **Whittemore, Budget Committee Alternate Representative; and Bob Saur, Londonderry Trailways**
11 **Representative**

12
13 M. Speltz called the meeting to order at 7:05 PM. He asked members for any comments or corrections
14 regarding the minutes of the November 2, 2010 meeting. Seeing none, he entertained a motion to
15 accept the minutes. A. Rugg so moved. D. Coons seconded. The motion was approved, 8-0-0.

16
17 J. Vogl announced that a webpage has been added to the Town website specifically for the Open Space
18 Task Force. It will be found under "Boards and Commissions" and will include all documents and
19 materials presented at each meeting.

20
21 He then presented a draft of the OSTF report's first chapter, which serves as an inventory of currently
22 protected open space, sources that funded those acquisitions, the benefits they provide, and
23 monitoring/maintenance efforts to date. T. McKenney observed that the Town Council's charge that
24 created the OSTF should be included in the introduction to the report. An expanded version of the
25 green infrastructure map that was introduced at the first meeting was reviewed (see attached, p. 2). It
26 not only identifies possible links between land already preserved to maximize protection of areas with
27 the best natural resource features, it includes the green infrastructures of Derry, Litchfield, Windham,
28 Bedford and Auburn to illustrate connections beyond the town borders. M. Speltz pointed out that the
29 purpose of the green infrastructure is to take the larger "hubs" of protected space such as the Musquash
30 and Laycock/Kendall Pond Conservation Areas and the Town/School recreation fields and connect them
31 together via "spokes" of further protection. While it can be argued that the conservation value of
32 athletic fields is limited when compared to other types of open space, M. Speltz explained that its
33 pervious surface provides the ability to filter groundwater and therefore protect natural resources. L.
34 Wiles asked if cemeteries should be considered as well. M. Speltz noted that they typically contain
35 interior impervious roads but that it could be investigated. He continued to explain that the spokes act
36 as opportunities for metapopulations of plants, animals, and resources such as water to migrate from
37 one area to another and sustain their overall quantities when individual areas are negatively impacted.
38 D. Coons questioned the need to preserve wildlife corridors in particular, based on the evident
39 adaptability of some species to development. T. McKenney believed it was apparent through data that
40 adaptability was limited to a limited number of species. M. Speltz confirmed that research has shown
41 adaptation to human development does vary. He offered providing information which specifies the
42 amounts of open land each regional species requires to ensure their survival.

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44 J. Vogl continued by stating that to date, permanently protected space in town amounts to 4,047 (or
45 15%) of the 26,945 acres in town (pp. 2-3). This includes land either owned or under conservation
46 easement by either the Town or another entity. An additional 4,205 acres in Londonderry are “partially
47 protected,” meaning that they are currently conserved (whether they are within utility corridors, areas
48 regulated by State statute or local ordinance, or are used for athletic recreation), but that their
49 conserved status could conceivably change at some future time. While State and local regulations
50 comprise 37% of this partially protected land, the Town’s Conservation Overlay District is only enacted
51 once a piece of land is subdivided, making that percentage more potential than actual. In addition,
52 exceptions are regularly granted within the COD buffers via Conditional Use Permits and within wetlands
53 by State Dredge and Fill permits (although D. Coons pointed out that those losses are often mitigated
54 with the protection of other land). Much of the land reserved under the COD buffers is typically a
55 portion of privately owned land within a given subdivision and is therefore never likely to be owned by
56 the Town. J. Vogl explained, however, that along with other forms of partially protected land, the Town
57 has a vested interest in ensuring they are maintained as open space. This will aid in keeping the actual
58 amount as close to the potential as possible. The consensus was that despite the uncertain nature of its
59 status, partially protected land should be included in the OSTF’s analysis, particularly since a change in
60 its protection in the near future is highly unlikely. Its inclusion in the report can be accompanied by an
61 explanation of the conditions that keep it from being considered permanently protected. J. Locke asked
62 if the amount of privately owned acreage within the COD could be separated out of the total. J. Vogl
63 said he would add that to the table of protection types.

64
65 J. Vogl continued the inventory analysis with a breakdown of the sources of funding for the 2,792 acres
66 owned or managed by the Town (pp. 5-6). The purchase of land or easements by the Town totals 1,976
67 acres and accounts for 70% of the \$15,266,693 spent to acquire open space since the first purchase of
68 land in the Musquash in 1978. Those direct town payments were often aided by State and Federal grant
69 funds, bargain sales (the sale of land for less than its appraised value for a tax benefit), money
70 appropriated through School and Recreation budgets, and penalties/donations. The remaining 821
71 acres were conserved without cost to the Town through mitigation or conditions associated with a
72 development project, gifts of land/easements, tax liens, and 2% of sources whose history remain
73 “unknown.” J. Vogl noted that the ability of grant funds to maximize acquisitions is reflected by the data
74 showing that \$1 of grant money was utilized for every \$5 of Town money spent on open space.
75 Competition for both State and Federal grants has grown over the years while the number of grants has
76 declined, M. Speltz added. J. Locke asked who prepares the grant applications. Some have been
77 prepared by Planning Department staff, M. Speltz explained, but often the significant amount of work
78 and expertise needed makes it necessary to hire outside sources such as the Rockingham Country
79 Conservation District.

80
81 Bond proceeds comprise 60% of the revenues generated for the Open Space Fund since 1997, totaling
82 \$8 million which was approved over five consecutive Town Meetings starting in 2001 (p. 9). In 2006 and
83 2007, additional bonds were not approved and since that time, none have been placed on the Town
84 Warrant. With the exception of the need to clarify the revenue category defined as “General Fund
85 Revenues to be reimbursed by Cons Comm,” the inventory summary shows that conservation efforts
86 over the last 23 years have yielded 8,252 acres of open space at a cost of \$15.27 million, \$10.63 of which



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87 came from Town funds. The Town owns 1,693 of those acres and holds easements on another 1,104
88 while the remaining 5,455 acres has been protected by other entities.

89
90 Preservation of local heritage in the form of 19.9 acres of permanently protected historic properties can
91 be tied into the conservation of open space (p.10). The two goals mutually benefit one another since
92 the values of historic properties are enhanced by preserving the open viewsheds around them while
93 Londonderry's history and cultural character is one rooted in agriculture. The Historic Properties
94 Preservation Task Force of 2006 compiled a list of 141 homes/sites/structures and 85 barns vetted
95 through specific criteria that determined they warranted protection from demolition and/or
96 development because of their historical relevance. (A. Rugg noted that three of those on the final list
97 have since been removed because of modifications done to the structures). The map generated from
98 the HPPTF's efforts will be included in the final draft of the OSTF report. M. Speltz said the HPPTF's list
99 should be reviewed by the OSTF to see if those structures reside within areas of available open space.

100
101 Benefits of conserved open space were next reviewed with categories used in the 2006 OSTF along with
102 the addition of School/Athletic Fields and Historic sites (p. 10). Within the original four categories, 21%
103 of the 6,639 acres with agriculturally significant soils are currently protected. Forty five percent of the
104 14,446 acres of water resources and 15,762 acres of unfragmented forest blocks of 50 acres or more
105 have been preserved. Of the 5,371 acres deemed to have scenic views, half have been conserved. To
106 explain the concept of agriculturally significant soils, M. Speltz stated that agricultural soil categories
107 were established by the Natural Resource Conservation Service to reflect a given soil's capability to
108 support agriculture. This is based on such things as how well it is drained, the steepness of its slopes,
109 and the amount of rock, clay, and/or sand it holds. Prime agricultural sources are considered the best
110 and are found in only 6% of NH soils. The next level represents soils of statewide agricultural
111 significance, which are so named because they are the best within a given state based on the conditions
112 and limitations germane to that region. Lastly are soils of local significance that are more specifically
113 suited to a specific area within the state. Given that there are over 26,000 acres of land in Londonderry
114 and the only 6,639 of that acreage is considered best for agriculture, the majority of soils in town are not
115 rated. J. Locke asked if the amount of land in each of those categories (aside from recreational fields)
116 can be separated into those permanently and partially protected. J. Vogl said he would make those
117 determinations and added that various graphics could be added to help illustrate all of the information
118 discussed wherever Task Force sees fit. M. Speltz predicted the data would show that the majority of
119 agricultural soils are permanently protected since wetlands would be the least adaptable to agriculture
120 and most wetlands are under partial protection. Conversely, J. Vogl anticipated that the majority of
121 water resources (including riparian buffers, wellhead protection areas, aquifers and streams) would
122 show to be only partially protected. J. Locke also asked for clarification as to whether the acreage
123 amounts are mutually exclusive between categories. J. Vogl explained that, in fact, they are not because
124 multiple benefits will intersect in different areas. M. Speltz added the importance of identifying those
125 areas of intersection so they can be made a priority since they maximize the use of open space funds.
126 He also suggested adding a category used in the last OSTF known as the "10 to 10 rule," an ideal which
127 seeks to provide enough open space so that every resident will be within a ten minute walk of at least
128 ten acres of open space. L. Wiles asked whether the "unfragmented forest blocks" include structures,
129 which J. Vogl replied they do not and that a buffer of approximately 40 feet was kept between the forest
130 areas and any nearby buildings when identifying those areas. Roads, however, are considered the most



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131 significant fragmenting feature and therefore that land is not included. This discussion lead to the topic
132 of scenic views and J. Vogl stated the scenic views map created during the 2006 OSTF should be updated
133 with input of the current OSTF members. Because these natural benefits are an inventory of what exists
134 based on the categories used in 2006, M. Speltz encouraged members to add categories during the
135 process. J. Vogl noted that the amount of land currently protected within the green infrastructure
136 would be added to the table of "Benefits Protected."

137
138 Stewardship was next discussed, with J. Vogl explaining that the Town is responsible for the
139 management of 1,693 acres of open space it owns and the monitoring of the 1,104 acres within 108
140 conservation easements (p. 11). The Conservation Commission, aided by Londonderry Trailways and
141 other volunteers, inspects town-owned conservation land and town-held easements. M. Speltz asked J.
142 Vogl to verify whether the 108 easements include: 1) those easements the Town holds executory
143 interest in and ensures is monitored by those who actually own them, and 2) deed restricted properties.
144 Easement monitoring is initiated with a baseline study that documents existing conditions of the land
145 while also confirming and clarifying the boundaries of the easement. That report is then used on an
146 annual basis to ensure maintenance of those conditions so any issues or violations can be addressed.
147 Baselines have been established for 24 properties, nine of which have continued to be monitored
148 regularly. The appendix of stewardship activities was then reviewed (pp 17-19) which outlines the funds
149 expended to date on stewardship, management, and survey costs, as well as the volunteer hours spent
150 on those tasks. It will serve as a guide to estimate per acre values for future stewardship costs. J. Vogl
151 noted the considerable amount of work done by Londonderry Trailways in maintaining, mapping, and
152 adding trails in the Musquash and Kendall Pond Conservation Areas. Stewardship of the five properties
153 that comprise the Historic District is the purview of the Heritage Commission (p.12). The Recreation
154 Department oversees the 77 acres between Nelson Road/LAFA Complex and West Road Fields and the
155 School District is responsible for all school athletic fields along with forested school property.

156
157 J. Vogl next introduced the members to the list of ten watersheds in Londonderry as identified the 1991
158 Water Resources Management Plan (p. 14). This will act as the first section of Chapter 2 in the OSTF
159 report entitled "Land Characteristics and Liabilities," and will lead into the issue of Potential
160 Groundwater Hazards. A new Hazard Mitigation Plan has been developed by the Southern NH Planning
161 Commission that identifies 134 hazardous waste generators in town, along with 26 above ground and 86
162 underground storage tanks, two solid waste facilities, and four Superfund sites. J. Vogl noted that he
163 would be investigating similar records provided by the NH Department of Environmental Services to
164 compare and verify the data and find the most updated information. When asked by M. Srugis how long
165 superfund sites are examined, M. Speltz replied that three sites in Londonderry are in the monitoring
166 phase, meaning the activities of removing hazardous materials and contaminated soil have been
167 completed and the groundwater is tested regularly via monitoring wells until existing quality standards
168 are met.

169
170 With the inventory of resources examined, M. Speltz turned the attention of the members to their initial
171 step in determining one of the main goals of the OSTF charge, i.e. "How much is enough?" Because
172 many of the values of open space are subjective and difficult to measure, consensus is needed to gain
173 quantifiable information from varying opinions and set parameters. While the values in the 2006 OSTF
174 were largely based on the viewpoints of the members, M. Speltz felt it was important to cast a wider net



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175 and solicit thoughts from all residents. He suggested disseminating a simple survey to the public via
176 print and internet media that would pose three main questions: 1) What land has scenic value, 2) What
177 land has recreational value and 3) how important are nature's values and benefits? A second survey
178 could seek the willingness of residents to purchase additional open space with Town funds to ensure
179 these values and benefits or even compare its priority amongst other Town expenditures. M. Srugis
180 noted the need to word questions clearly and effectively and to provide an explanation of the goals of
181 the survey.

182
183 M. Speltz next asked for suggestions to add to the list of "Nature's Value and Benefits" provided by open
184 space that were specified in OSTF charge. "Community heritage" had been added at the November 4
185 meeting. B. Manning replied that quality of life is an important value to identify. D. Coons noted the
186 potential variety of ideals inherent in that topic. M. Srugis offered that housing density as discussed
187 during the new Inclusionary Housing ordinance (a/k/a Workforce Housing) discussions would be a
188 worthwhile topic. L. Wiles questioned again whether recreational fields should be included when
189 discussing nature's benefits and values since their purpose is limited to athletic events and their
190 maintenance with the use of fertilizers and pesticides can negatively affect such things as drinking water
191 quality. M. Srugis stated that levels of fertilizer used in the LAFA fields are low and believed that recent
192 testing of the School recreation fields showed the same. M. Speltz acknowledged the need to detail the
193 pros and cons of recreational/athletic fields, (including the town's golf course where fertilizer use is
194 undoubtedly higher), but said that in the broader picture, they still provide the pervious surface that is a
195 part of overall water quality.

196
197 Once members make any additions to the list of values and benefits, staff can begin researching how to
198 measure those items and determining their locations in Londonderry. Drinking water quality can be
199 gauged by looking at the land uses surrounding wetlands, along with the amount of impervious surface
200 in close proximity to them. Species diversity as well as connections between plant and animal habitat
201 can be found in data compiled in NH Fish and Game's Wildlife Action Plan and the NH Natural Heritage
202 Bureau. Flood storage can be examined with the use of flood maps from the Federal Emergency
203 Management Agency while climate scientists have provided calculations to predict future precipitation
204 events (regardless of their cause). J. Locke asked J. Vogl if he could obtain figures showing the number
205 of Londonderry residents serviced by well water, Pennichuck water, and Manchester water. M. Srugis
206 asked if it was possible to determine how much more development can be supported by existing
207 groundwater within the Town. M. Speltz replied that he and staff could investigate if an approximation
208 can be made. When these measurements and location of resources are provided at the January
209 meeting, the OSTF can begin to determine what amount of that open space will be needed to provide
210 satisfactory levels of the associated benefits. Rather than producing a specific number, M. Speltz
211 suggested providing a range of how much of that land will be needed to satisfy certain levels and allow
212 residents and Town leaders to determine what point along the spectrum is best for the town and its
213 future needs.

214
215 The meeting adjourned at approximately 8:55 PM. The next meeting will take place on January 6, 2011.

216
217 Respectfully submitted,
218



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219

220

221 Jaye Trottier

222 Secretary