



An Investigation of Inland Wetlands Commission Practices in Connecticut

Findings, Recommendations, and Best Practices

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INTRODUCTION

Inland wetlands are an ecological resource that provide benefits in water quality, aquifer recharge, reduced flooding, habitat for a multitude of terrestrial and avian species, and the control of erosion. Wetlands serve as buffer zones to the state's rivers and streams. In that capacity, they play a key role in reducing phosphorus and nitrogen discharges to Long Island Sound. Eliminating hypoxic conditions in Long Island Sound depends upon statewide efforts to protect wetlands.

To assess the effectiveness of Connecticut's management of inland wetland resources, WestCOG evaluated current wetland protection practices, inland wetland commission administrative procedures, and strategies to improve wetland protection. Connecticut relies on 1,437 volunteers to staff inland wetland commissions in the 169 municipalities of the state.¹ In all but four, training is not a prerequisite to serve on an inland wetland commission. The findings of this study are based on a review of the 169 municipal ordinances that established inland wetland commissions as well as the 169 municipal inland wetlands regulations.² Since these commissions are the arbiters that determine how or if the state's wetland resources are protected, WestCOG further examined sixty Connecticut municipalities to determine the cost and benefits of current statutory requirements and local administrative practices.

The purpose of this investigation is to ensure that administrative and regulatory procedures adopted in municipalities are consistent with the goal of protecting the state's inland wetlands. Despite having one of the earliest wetland protection programs in the United States, Connecticut has continued to lose thousands of acres of wetland resources over the last fifty years.³ Rather than protecting wetland resources, practices have often emphasized wetland mitigation or wetland replication strategies.⁴ In part, this approach reflects a state regulatory program that treats all wetlands as equivalent. In contrast, states such as Vermont have differentiated wetland resources from each other based on the functions and values they provide.⁵ Vermont also protects wetland buffer zones with statewide buffer standards reflecting the importance of the resource. In contrast, Connecticut does not have statewide inland wetland buffer regulations. Each municipality is left to its own discretion to determine the size of the buffer zone – known as the upland review area.⁶ Rather than treated as an ecological resource in its own right, the upland review area is treated as a negotiable to be either protected or authorized for development based on the judgements of volunteer commission members.

For this examination, WestCOG reviewed the inland wetland ordinances, regulations, and commission meeting minutes for sixty municipalities in Connecticut to determine current practices. Half of the municipalities studied have adopted the zoning concept known as the buildable square (or rectangle).

¹ There are 1,104 authorized inland wetlands commission members and 333 authorized alternate members in the 169 municipalities of Connecticut.

² Connecticut has 170 inland wetlands commissions even though there are only 169 municipalities in the state. The town and city of Groton each have separate authority to regulate inland wetlands.

³ Connecticut Council on Environmental Quality, *Swamped, Cities, Towns, the Connecticut DEP and the Conservation of Inland Wetlands*, October 1, 2008, p. 6.

⁴ Some municipalities allow wetlands to be filled as long as an equal or greater area of wetlands is created to compensate for the loss. This practice is controversial largely because there are a wide range of wetlands functions and values associated with the original wetlands that may not be replicated by the artificial wetlands project.

⁵ Vermont Department of Environmental Conservation, [Vermont Wetland Rules](#), February 10, 2023, p. 11.

⁶ Western Connecticut Council of Governments, *The Case for Riparian Corridor Protections: Zoning Strategies to Reduce Pollution of Inland Waters and Resultant Hypoxia of Long Island Sound*, August 10, 2021

This is a tool that designates land within any approved building lot that is free of wetlands and suitable for a building and septic system leaching field. If the buildable square functions as a wetland protection tool, the hypothesis of this investigation is that municipalities that have adopted this tool would have fewer wetland impacts than those where this tool did not exist. Many factors influence the potential for wetland impacts, including development pressures that vary across the state. The municipalities included in this investigation have been selected to normalize the comparison between those that have adopted the buildable square concept and those not using this tool. Since there are variations in the development pressures between urban, suburban, and rural municipalities this study also explicitly identified municipalities without and without the buildable square tool to allow equal representation within these distinct urbanization levels.

In addition to the buildable square, this investigation reviewed the administrative practices of each inland wetlands commission to identify current review and approval procedures, training requirements, the role of the inland wetland agent, wetland enforcement practices, meeting management practices, and the procedures for selecting volunteer commission members. Finally, this examination recommends a variety of strategies to improve wetland management in Connecticut.

ASSESSMENT OF WETLANDS ADMINISTRATIVE PRACTICES

Composition of Wetlands Commissions

Appointment of Commission Members

The appointment of members to inland wetland commissions is of considerable interest to environmentalists, developers, and political leaders in each of the state's 169 municipalities. The procedures for selecting members vary across the state. However, with the exception of twenty-eight municipalities that rely on the appointment decisions of one municipal executive – whether that be the first selectman, mayor, town council chair, city or town manager – 142 of the 170 municipal governments (84%) appoint inland wetlands commissions with the consent of both major political parties or with joint appointment authority shared with commissions that have overlapping land use responsibilities (e.g. planning commissions, zoning commissions, conservation commissions and water pollution control authorities). Fourteen municipalities require membership to include cross-appointments with planning, zoning, and/or conservation commission members (Table 5).

It is not clear that multiple appointments improve inland wetland decision-making. Indeed, the Connecticut Council on Environmental Quality has argued zoning commissions have an entirely different mission than inland wetlands commissions.⁷ The result, according to CEQ is a greater likelihood development goals may trump wetland protection. Cross appointments between zoning and inland wetland commissions are a relatively minor example of a possible conflict of interest between competing land use objectives. The larger issue is the joint management of zoning and inland wetlands commissions by the same members. In Connecticut, seven municipalities have merged the zoning and inland wetlands commission functions (Bridgeport, Hartford, Manchester, Mansfield, New Haven, Union, and West Hartford). With the exception of Mansfield and Union, the other five municipalities are urban in character. Consolidating the zoning and inland wetlands functions is likely an

⁷ Connecticut Council on Environmental Quality, *Swamped, Cities, Towns, the Connecticut DEP and the Conservation of Inland Wetlands*, October 1, 2008

administrative efficiency measure given the limited wetland resources that exist in these five urban centers.

With very few exceptions, municipal appointment strategies do not explicitly seek out expertise in wetland science, soil science, or ecology. The exceptions are Plainfield and Windsor, which require at least one member of the commission to be a soil scientist or have expertise in related areas. Given the lack of financial compensation provided for volunteer members, inland wetlands commissions depend on individuals with a strong sense of service and sufficient free time to accommodate evening meetings, public hearings and periodic morning and afternoon site visits.

Quorum and Meeting Attendance

It has not been easy to recruit volunteers for and secure participation on inland wetland commissions. Based on the WestCOG investigation of inland wetland practices in 2022, few commissions were able to maintain full attendance of members throughout the year. On average, 18% of commission members were absent throughout the year (Table 3). Sixteen municipalities had absentee rates ranging from 25% to 36% for the entire year. In contrast, seven municipalities had absentee rates of 5% or less. To address absenteeism, thirty-one of the 169 municipalities in Connecticut have adopted policies that enable the Board of Selectmen or other municipal executive to dismiss members who fail to attend three or more consecutive meetings during a six or twelve month period.⁸ This approach may have benefits, but it also can be counterproductive in a world where the universe of potential candidates is relatively small, and acquisition of relevant expertise takes time. In 2022, numerous inland wetland commissions across Connecticut had vacancies for members as well as alternates. This challenge existed despite the ease of attending remotely attended commission meetings during the Covid-19 pandemic.⁹ The real issue was not attending in person meetings; it was finding candidates willing to commit time to a relatively unappreciated form of public service.

Public attitudes concerning public service may exacerbate the challenge of maintaining full attendance. Public service to one's municipality may be less of a priority in a highly mobile world, and in an economy where dual income households and flexible work schedules are the norm. These factors may help explain an apparent decline in interest in serving on local commissions. Yet a 2014 Gallup Poll that evaluated volunteering in one's community found that such service had a positive impact on personal well-being. According to the Poll:

“Americans who actively work to better their communities have higher overall well-being than those who do not. U.S. adults who agree that they have received recognition for helping to improve their communities in the last year have an average Well-Being Index score of 70.0, while those who disagree have an average of 58.5. Importantly, this relationship between well-being and receiving recognition for community involvement

⁸ For example, the Branford Board of Selectmen can remove any Inland Wetlands Commission member who has failed to attend four consecutive meetings. See Section 109.3, Removal of Members, the Branford Municipal ordinances. Farmington's inland wetlands ordinance automatically remove members after three consecutive absences in a six-month period unless this provision is waived by the chairman for good cause.

⁹ It should be pointed out that, according to one inland wetlands agent, the town's Inland Wetlands Commission never authorized remote meetings using virtual meeting technologies. According to the agent this was due to the “old school” thinking of the commission members.

persists even after controlling for the effects of age and income -- two factors that are related to higher community well-being.”¹⁰

Given the recruitment challenges faced by municipalities in finding volunteers, many have reduced inland wetlands commission membership from nine to seven, and others have reduced it even further from seven to five members. For example, Chaplin recently reduced its inland wetland commission from seven to five members and increased the term of service to 6 years. Based on this examination, 33% of the state’s 169 municipal inland wetland commissions now only require five members. In contrast, 67% of the state’s inland wetland commissions still require seven or more members. Reducing the size of the inland wetland commission may simplify the chore of finding volunteers. However, smaller quorums come with their own challenges. To avoid cancelled meetings, 90% of five-member commissions require two or three alternate members to ensure a quorum can be achieved.

Training of Commission Members

Lack of training is a near universal issue that affects the efficiency and, potentially, effectiveness of application review. Only four municipalities require all commission members to be fully trained (Beacon Falls, Farmington, Milford, and Ridgefield). In contrast, Connecticut’s inland wetlands statute only requires one member of the commission or its staff to obtain training provided by the Connecticut Department of Environmental Protection (now CTDEEP). In practice, this is a one-time training requirement for one designated person – almost invariably being the authorized inland wetland agent for the municipality.¹¹ The only annual training requirement applicable to the entire commission is to provide information to members of the agency which “summarizes the provisions of the training program.”¹² A review of the Inland Wetland Commission minutes for the sixty municipalities studied revealed very limited time devoted to this topic, with most of the discussion focused on how to access the online training modules.

Commission members are not expected to be wetland scientists. However, they need to know how to apply the regulations and to be familiar with basic principles of wetland science and wetland delineation practices.¹³ The eight-hour online course provided by the CTDEEP covers eight modules. It must be completed within a 60-day period. The modules have not been updated during the last five years.

While this online approach may be convenient and inexpensive, it does not include an instructor to respond to questions nor does it provide field work experience for commission members. The result is that inland wetland commission members must rely on the designated inland wetland agent and consultants to determine the specific regulatory and wetland delineation concerns that may emerge

¹⁰ Lindsey Sharpe, [Americans Serving Their Communities Gain Well-Being Edge](#), Gallup Poll, August 12, 2014

¹¹ Public Act 96-157 indicates that after the initial training “The commissioner shall annually make such program available to one person from each town without cost to that person or the town.” The operative term “available” places the burden on the Commissioner of the Connecticut Department of Energy and Environmental Protection – not on the municipal inland wetland Commission. More importantly, there is no mention of an annual training requirement.

¹² Public Act 96-157 states; “Each inland wetlands agency shall hold a meeting at least annually at which information is presented to the members of the agency which summarizes the provisions of the training program.”

¹³ Siniscalchi, Alan J., Connecticut Association of Conservation and Inland Wetlands Commissions, Inc. Position paper No. 1: Inland Wetlands Commission Training, 2002.

for any given application. This puts commission members at a disadvantage in evaluating applications that require knowledge of wetland science, regulations, and case law. Rather than in-house experts reviewing the work submitted by applicants, the commission must contract outside experts to represent the commission's interests. The result is the commission often serves as arbiters of dueling experts – those hired by the commission and those retained by the applicant. Choosing between dueling experts is not a skill in which inland wetland commission members are trained. Moreover, in those instances where neither the commission nor the applicant retain wetland scientists, the decision-making process may only be as good as the training received by the commission members.

Training versus Workload

As mentioned above, the Connecticut Department of Energy and Environmental Protection provides an eight-hour training program that must be taken by at least one person in each municipality. Generally, the local inland wetland agent is the one designated to take this training. The challenge faced by volunteer commission members, whose terms of office generally range from 2 to 4 years, is that the amount of training required is out of proportion to the amount of work expected of commission members in any given year (Table 5). In a normal occupation, training hours might represent no more than 5% of a worker's total time in any given year. However, because the average workload of inland wetland commission member is 16 hours a year (e.g., attending commission meetings), the 8-hour training is equivalent to 50% of the average commission member's annual workload.

Furthermore, it is not realistic to expect that volunteer inland wetland commissioners can be trained in the complexities of wetland science, wetland regulation administration and field identification techniques in one 8-hour session. Typically, those that need to obtain working knowledge of the regulations, wetland science, and wetland delineation practices should attend at least a 40-hour course that offers field experience. Indeed, the wetland staff working for the Vermont Agency of Natural Resources are expected to take the Army Corps of Engineers 40-hour wetland delineation class as part of their basic training. They are also required to have a bachelor's degree or higher in a life or physical science, engineering, a social science, data science, or an environmental or natural resources field. Since this level of training and education is unlikely to be acceptable or feasible for Connecticut's volunteer commissions, greater regulatory authority is often assigned to dedicated professional staff. This is one of the reasons that Vermont has chosen to manage wetland issues through professional staff operating within its four regional districts. Connecticut could benefit from such an approach.

Dual-Purpose Commissions

Finding volunteers with the right training or professional background is only one issue that hinders the effective review and evaluation of wetland permit proposals. Many of Connecticut's 170 inland wetland commissions have also been charged with additional responsibilities including also serving as the conservation commission, aquifer protection agency, forest practices programs, flood and erosion control board, stormwater management agency, soil and erosion control board, and/or planning and zoning commission. A total of 65 of the state's 170 inland wetlands commissions (38%) are performing one or more additional responsibilities (Table 5).¹⁴ The most common additional duty is also serving as conservation commission (46 municipalities or 27% of all inland wetlands commission). In these

¹⁴ There are 170 inland wetland commissions – one more than the 169 municipalities in the state. This is because the town and city of Groton each have separate inland wetland commissions.

instances, the objectives of the conservation commission play a subservient role to those of the inland wetland commission. The constant pressure to review and evaluate inland wetland applications within prescribed timetables means municipal programs to protect open space, acquire land easements and similar programs may be compromised.¹⁵ Similarly, eight municipalities have delegated the aquifer protection agency function to the inland wetland commission, seven have combined planning and zoning functions with the inland wetland commission, four have merged the function with a flood control or stormwater management agency, three have merged the function with an environmental protection commission, and three have merged the function with a forest practices program. The existence of sixty-four inland wetlands commissions with multiple additional duties is in part a reaction to state unfunded mandates. Faced with the task of finding volunteers to oversee a growing number of state-created programs, municipalities have merged commissions with similar or overlapping duties. Doing more and more with a limited set of volunteers eventually has consequences.

Application Process

Pre-Application Reviews

Based on the analysis, it appears few municipalities work with applicants to avoid wetlands before the submission of wetland applications. This focus on processing impacts post-application rather than avoiding them pre-application may unnecessarily increase the workloads of commissions and applicants.

This orientation in part reflects the permit procedures laid out in the model inland wetland regulation issued by the Connecticut Department of Energy and Environmental Protection.¹⁶ The model regulations focus on the application process. For example, the model regulations state, “Any person intending to conduct a regulated activity or to renew or amend a permit to conduct such activity, shall apply for a permit on a form provided by the Agency.” Pre-application consultation is only considered when an applicant believes there could be a significant impact to wetlands. Specifically, the regulations state, “A prospective applicant may request the Agency to determine whether or not a proposed activity involves a significant impact activity.” Since the majority of applications for wetlands permits are minor in scope, reserving pre-application reviews to applicants concerned with potential significant impacts screens out the vast majority of applications that ultimately come before an inland wetlands commission. This includes applications that may have wetlands impacts (but whose impacts are minimal or moderate). Many of these impacts – and the associated workload on commissions and applicants – may be able to be avoided through informal, pre-application reviews.

In contrast, the Inland Wetlands Commission of Union, Connecticut relies on an informal review process to encourage applicants to discuss their projects before submitting applications.¹⁷ Perhaps as a

¹⁵ The WestCOG analysis of 2022 inland wetland commission minutes in sixty Connecticut municipalities revealed very little time spent on conservation commission matters in those municipalities where inland wetlands and conservation commissions have been combined. These findings are consistent with the Connecticut Association of Conservation and Inland Wetland Commission’s Position Statement: Combined Versus Separate Conservation and Inland Wetland Commissions, CACIWC, 2002.

¹⁶ The CTDEEP model inland wetland regulations were last updated in 2006 and the advisory notices and case law references are only current are of 2018. A June 2023 WestCOG review of Connecticut Supreme Court cases for the period 2018 to 2022 involving inland wetlands commissions found seven cases that pertain to Connecticut wetlands. These cases have not been referenced on the CTDEEP. Lack of CTDEEP wetland staff is a contributing factor to the outdated training materials on the agency’s website.

¹⁷ Interview with Mathieu Silberman, Union Zoning Enforcement Officer, June 13, 2023.

result, in 2022 the Commission had just two wetlands applications for the entire year – the lowest number of applications of any municipality included in this study.¹⁸ Similarly, Wilton’s inland wetland regulations provide that “prior to the submission of a wetlands application, the applicant may meet with the Commission and/or its designated agent to discuss the application requirements and review pre-application plans.”¹⁹ These findings are consistent with the approach taken by the Vermont Agency of Natural Resources (ANR) wetland permit program. In 2022 the state of Vermont issued only 202 wetland permits. This remarkably low number of permit approvals reflects the ANR focus on diverting development proposals from wetlands through an informal pre-application review process. The result was 90% of the development proposals reviewed in the pre-application process during 2022 were altered to avoid wetlands.²⁰

Vermont’s Wetlands Program is managed as a state funded initiative. The program, which uses professional staff at the state level, emphasizes working with applicants to avoid wetland developments. According to Laura Lapierre, Wetlands Program Manager for the Vermont Agency of Natural Resources, “staff work hard to reduce the need for permits where about 1 in 10 projects that they provide assistance on turns into a permit need.”²¹ Lapierre’s emphasis upon upfront technical assistance confirms some of the findings of this study. Wetland avoidance strategies should be the foundation of an inland wetlands program. A similar approach could be established in Connecticut using the regional Councils of Governments as the administrator of the inland wetland program.

Field Inspections

Wetlands commissions appear to spend more time in meetings than conducting on-site investigations. The result is that the feedback commissions give on siting alternatives is largely based on desk reviews, rather than site visits. A review of the minutes from the sixty inland wetland commissions investigated found only five had six or more site walks in 2022 (i.e., the commissions most committed to site visits only had one site walk every other month) despite having on average 42 “application events” that year (Table 6). Three of those five municipalities with the highest frequency of site inspections were in the Western Connecticut Planning Region. With the average inland wetland commission convening only 1.5 site walks in the entire year of 2022 – despite an average of 42 application events that year²² – commission members must rely on feedback from the Inland Wetland Agent or the applicant for information concerning the on-site wetland issues.

The lack of site visits across most of the sixty commissions surveyed raises questions. If commission members are relying on the inland wetland agent or applicant, how independent are commissions?

¹⁸ Union may not be representative of other rural municipalities due to its small population and limited number of building permits issued in 2022. However, the town’s reliance on an informal review process remains an important tool to divert development from adversely impacting wetlands.

¹⁹ Inland Wetlands and Watercourse Regulations for the Town of Wilton Connecticut, 2007, p. 19.

²⁰ Laura Lapierre, Wetlands Program Manager, VT Agency of Natural Resources, personal correspondence, July 28, 2023

²¹ Laura Lapierre, Wetlands Program Manager, VT Agency of Natural Resources, personal correspondence, July 28, 2023

²² An application event includes all new, old, and pending applications that may be presented to the commission on any given meeting. Due to the deliberative process, most applications are not reviewed and decided upon within one meeting. Based on the findings of this investigation, most applications may take several months to be reviewed and acted upon. Indeed, in the case of notices of violation the review and deliberative process may take six to 12 months depending on the nature of the violation.

Without direct first-hand experience of the site, commission members frequently spend time asking questions that could easily be resolved through a site inspection.

Public Hearings

Based on this study, 40% of inland wetlands commissions had no public hearings in 2022 (Table 6). In contrast 19, or 32%, of the commission had five or more public hearings. The disparity in the use of hearings may owe to differing perceptions of what constitutes a “significant impact” to wetlands, a statutory term which triggers a hearing.²³ To clarify the decision-making process, two of the sixty municipalities examined have explicitly defined three categories of impacts. The Inland Wetlands Commissions of Norwalk and Wilton define minor, moderate, and significant impacts with examples of projects that fall into each of these three categories (Appendix 1). Establishing uniform interpretations of the phrase “significant impact” coupled with commission member education may improve the use of the public hearing process in those instances where hearings are triggered by the commission’s interpretation of the word significant.

Quantity of Applications

There is a large disparity in the workload across the sixty inland wetland commissions examined. At one extreme the town of Union, the least populous municipality in Connecticut, had only two inland wetland applications in 2022. In contrast, Brookfield had 114 new, pending, and ongoing inland wetland application events representing 29 permit applications before the commission in 2022 (Table 6).²⁴ These differences reflect different approaches to meeting management, site walks, and informal consultations with applicants before a formal submission is made to the commission. The amount of time devoted to applications and violations varies dramatically across the eighteen municipalities in Western Connecticut (Table 8). At one extreme nine municipalities (Bridgewater, Brookfield, Darien, Greenwich, New Fairfield, New Milford, Sherman, Westport and Wilton) processed, on average, application and violation events in 16 minutes or less during the year 2022. In the case of Greenwich and Westport – both of which had the highest number of application events – the commission’s meeting management efficiencies reflect significant staff support in guiding the review and evaluation process. In contrast, many rural municipalities in Western Connecticut rely on volunteer staff to review and evaluate appropriate permit conditions to be applied to any given permit before the commission. These differences also reflect different development pressures across the state of Connecticut. This issue is discussed in more detail below.

²³ Inland Wetland Commissions have some discretion in determining if an application poses a significant impact to wetlands (see bold text below). The CTDEEP model regulation provide for the following: “The inland wetlands agency shall not hold a public hearing on an application unless the inland wetlands agency determines that the proposed activity may have a significant impact on wetlands or watercourses, a petition signed by at least twenty-five persons who are eighteen years of age or older and who reside in the municipality in which the regulated activity is proposed, requesting a hearing is filed with the inland wetlands agency not later than fourteen days after the date of receipt of such application, **or the inland wetlands agency finds that a public hearing regarding such application would be in the public interest.** The inland wetlands agency may issue a permit without a public hearing provided no petition provided for in this section is filed with the inland wetlands agency on or before the fourteenth day after the date of receipt of the application. Such hearing shall be held no later than sixty-five days after the receipt of such application. All applications and maps and documents relating thereto shall be open for public inspection. At such hearing any person or persons may appear and be heard.”

²⁴ The 29 permit applications appeared on the Brookfield Inland wetland Commission’s 2022 minutes a total of 76 times. The number of time applications were on the commission’s agenda ranged from 1 to 9 times or, on average, 2.6 meetings were held on each application from receipt to approval.

Professional Staff and Enforcement

Speed of Processing

The efficiency with which inland wetlands commissions process “application events” varies across the eighteen municipalities in Western Connecticut. As noted earlier, an application event represents the number of new, pending, or old applications that come before a commission at each meeting. Since most applications are dealt with over multiple meetings, the total amount of time spent on application events provides a measure of the time efficiency in reviewing, evaluating, and disposing of applications. The efficiency of this process is influenced by the preparatory work of the municipal inland wetland agent. It is also influenced by the level of member training, member participation in site walks, and the meeting management skills of the chair of the commission. These factors bear upon the amount of time spent reviewing and approving applications. Any given application could consume more or less time than the average time calculated on a yearly basis.

In the Western Connecticut planning region, nine municipalities processed application events in 16 minutes or less (Bridgewater, Brookfield, Danbury, Greenwich, New Fairfield, New Milford, Sherman, Westport, and Wilton). In contrast, two municipalities took 40 minutes or more to achieve the same objectives (Bethel, and Weston). The results of this analysis suggest there may be an opportunity to explore process improvements in the review of applications including the degree to which the inland wetland agent is authorized to prepare critiques of applications and to independently approve wetland applications that have minimal impacts to wetlands (Tables 6 and 8). This may be an effective means of improving the administration of inland wetland regulations in Connecticut. Meeting management training may also be in order.

Professional Staff and Enforcement

Inland Wetland Agents

The Connecticut Inland Wetland statutes enable the creation of an inland wetland agent with the authority to approve inland wetland applications that occur within the upland review area when there would be minimal impact to wetlands. A total of 92% of the state’s inland wetlands commissions authorize the use of an inland wetland agent to approve inland wetland applications that are deemed to create minimal wetland impacts. This includes seven inland wetlands commissions that have modified the authority of the agent either by 1) precisely defining what a minimal impact means or 2) constraining the agent’s authority through additional review procedures. These seven municipalities did not adopt the delegation of authority provisions contained in the Connecticut statutes (Ellington, Farmington, New Milford, Norwalk, Ridgefield, Stratford, and Wilton). For example, Farmington has chosen to limit the delegated approval to residential properties. The Farmington Inland Wetland regulations state:

“The Commission may delegate to its duly authorized agent (the Town Planner, Assistant Town Planner or Zoning Enforcement Officer), after having completed the comprehensive training course offered by the Department of Energy and Environmental Protection, the authority to approve an activity that is located within the upland review area which is deemed to be accessory to a residential use (a one family or two family home) including but not limited to accessory structures, maintenance of landscaped or natural areas, minor land clearing,

grading, drainage improvements or utility installations when such agent finds that the activity would result in no greater than a minimal impact on any area of wetlands or watercourse.”²⁵

As mentioned previously, Wilton has limited the administrative role of the inland wetland agent by establishing a three-tier system for wetland impacts spanning minor, moderate and significant (Appendix 1). Those wetland impacts defined as minor fall within the administrative authority of the agent.²⁶ This three-tier approach to determining wetland impacts is also used in Norwalk.

Despite these slight differences in delegated authority, the most striking finding of this investigation is that ten of the eighteen inland wetland commissions in Western Connecticut did not indicate any use of administrative approvals by the local inland wetlands agent in 2022 (see Tables 1 and 2). In contrast, during that same year 198 administrative approvals were issued by the remaining eight municipalities. A total of 94% of those approvals took place in Greenwich (55), New Canaan (34), New Milford (15), Norwalk (38) and Wilton (45). A review of the administrative approvals granted in 2022 revealed patios, pools, and similar amenities represented 28% of the approved projects, followed by house construction (15%) and septic system repairs, replacement, and failures (11%).

Projects in the upland review area have been treated as creating minimal impacts to wetlands and watercourses despite growing scientific evidence that such areas play a critical role in protecting the water quality of the state’s rivers and streams.²⁷ It is not clear whether the ten inland wetland commissions in Western Connecticut that have not used administrative approvals have not done so because they have not authorized their agent to undertake administrative approvals, or whether the lack of such approvals reflects factors such as having fewer projects in the upland review area due to better subdivision and lot design that avoid wetlands impacts and thus obviates the need for review.²⁸

Increasing the role of the inland wetlands agent in applications with direct impacts to wetlands could improve the administration of the state’s inland wetlands regulations. This approach would require state legislation and a higher level of training and professional credentials than is currently provided by CTDEEP. Such an approach may benefit from a standardized wetlands impact classification system such as the three tiers used in Norwalk and Wilton. Using that approach, inland wetlands agents could be charged with administrative approvals of minor and moderate impacts to wetlands. Expanding the legal authority of the agent would allow volunteer inland wetland commissions to focus on applications expected to have the most significant impacts.

However, it would also require a local commitment to better trained wetland professionals whose salaries are commensurate with their skills, experience, and training. It is instructive to note that CTDEEP supports the use of Licensed Environmental Professionals (LEP) to make independent decisions concerning the remediation of hazardous waste sites.²⁹ The intent of the LEP program is to

²⁵ Town of Farmington Regulations for Inland Wetland and Watercourses Regulations, 2018, p. 11

²⁶ Inland Wetlands and Watercourse Regulations for the Town of Wilton Connecticut, 2007, pp. 5-6.

²⁷ For an extensive review of this issue, see, *The Case for Riparian Corridor Protections: Zoning Strategies to Reduce Pollution of Inland Waters and Resultant Hypoxia of Long Island Sound*, Western Connecticut Council of Governments, August 10, 2021

²⁸ It should be noted that in the case of Newtown, the inland wetlands agent was not authorized to conduct administrative approvals in the first seven months of 2022 until the required training had been completed.

²⁹ According to the [CTDEEP website](#), “The Licensed Environmental Professional (LEP) Program was established by Public Act 95-183. Pursuant to Section 22a-133v(b) of the CGS, the State Board of Examiners of Environmental Professionals was established within the Department of Energy & Environmental Protection. The LEP regulations

expedite the cleanup of hazardous waste sites in a timely and professional manner to the highest ethical standards. The adoption of a similar program for licensed or credentialed inland wetland agents could dramatically improve the protection of wetlands while simultaneously reducing the burdensome review and approval process established by Connecticut's inland and wetland and watercourse statute. Such a program could also reduce the financial burden on municipalities, by allowing towns where the volume of applications is inadequate to support a local employee to share a certified inland wetlands agent or to contract with an independent one.

At a minimum, the current CTDEEP training should be upgraded to establish higher training standards for inland wetland agents than volunteer commission members. This is an issue that should be given immediate attention, especially when agents are given administrative approval over so-called "minor wetland impacts" in upland review areas without any statutory or case law clearly defining that concept.

Wetland Enforcement

Wetland violations and enforcement practices vary widely across the sixty municipalities. At one extreme, fourteen inland wetland commissions did not identify any enforcement issues in 2022 (Table 6). One inland wetland agent indicated the only violations that come before the commission are those that are submitted by neighbors upset about the activities occurring on nearby properties. In contrast, twenty-five commissions identified nine or more enforcement or wetland violations in 2022 (ranging from 9 to 135 enforcement actions amongst the sixty municipalities included in this investigation).³⁰ Many of these actions were directly tied to inspections of wetland remediation or mitigation projects that were monitored by the town's inland wetland agent. The actual number of unique enforcement actions was less than those tabulated in the monthly minutes of the commissions since nearly all enforcement actions or notices of violations tended to be carried forward through many months of deliberation throughout 2022. This suggests the challenge of correcting violations in a timely manner.

None of the commissions surveyed had developed field citation manuals to identify and address common wetland violations and procedures for addressing minor violations through a ticketing program.³¹ The Connecticut Statutes authorize inland wetlands commissions to establish fines for violations of their regulations.³² The use of corrective action fees administered at the local level is an effective means of addressing wetland violations without having to exercise the more cumbersome and costly use of the courts to resolve wetland violations. In the Western Connecticut planning region only nine municipalities have published fee schedules for compliance violations. With the exception of Wilton, these schedules do not define specific violations according to their severity of impact. Furthermore, six municipalities (including four of which also have compliance violation fee schedules)

were adopted on June 2, 1997, concerning the professional ethics and conduct appropriate to establish and maintain a high standard of integrity and dignity in the practice of an LEP.

³⁰ An enforcement action is not to be confused with a specific site enforcement list. This investigation tabulated every enforcement action brought before each inland wetland agency even when that enforcement action may have been discussed at the previous commission meeting or even for the past six months of meetings. By calculating enforcement actions in this manner, the time efficiency of the commission's decision-making process was a more accurate representation of the time commitments given to enforcement issues.

³¹ An innovative means of addressing common violations of wetlands regulations has been developed by Dade County, Florida. For insights on the benefits of a field citation program see; Sapp, William W. "Improving Wetlands Enforcement through Field Citation", *Environmental Lawyer*, 1995 1(3), 747-792.

³² See Section. 22a-42g. Municipal fine for violation of wetlands regulations.

have also adopted fee schedules for applications that have significant wetlands impacts (Table 9). It is not clear if higher fees imposed on applicants proposing significant wetlands impacts serve to deter development in wetlands or if they are intended to address the increased workload and greater public resources demanded of the commission.

Alternative Approaches to Regulating Inland Wetlands

Buildable Square as an Impact Avoidance Strategy

To determine if the concept of a buildable square free of wetlands has positively affected the workload of inland wetland commissions, WestCOG reviewed the monthly minutes for each inland wetland commission in 2022. The investigation included 30 municipalities that adopted the concept of the wetlands-free buildable square and compared their workload to 30 other municipalities that had not adopted this concept. While other factors may influence the workload of an inland wetlands commission – including development pressures, limited staff, absenteeism among commission members, and limited educational training – there is no reason to believe that the salience of these factors differs between the two groups studied. The 30 inland wetlands commissions operating with buildable square controls in their municipality’s zoning regulations were primarily rural and suburban in character (93% of those included in this study). In contrast, the 30 commissions operating without buildable square controls in the local zoning were more urban in character (37% of those in this study). In part this may reflect that urban areas have public sewers, which in turn may reduce the need for the buildable square concept.

To normalize the comparison, the workload of each inland wetland commission was tabulated based on meetings, site walks, and public hearing conducted in 2022. The workload, as measured in the hours a commission spent on inland wetland applications, public hearings, and enforcement issues, was tabulated for each of the 60 municipalities. Excluding 13 urban municipalities where the buildable square tool may be of less import, this study found a significant wetlands workload benefit in those municipalities that adopted the buildable square concept. On average, municipalities with a buildable square prohibiting wetlands within a specified area of a building lot had 33% less wetland work – as measured by the total meeting hours devoted to wetland commission matters – than those without this land use tool (Table 4).³³

This finding may be of interest to the 64 suburban and rural municipalities in Connecticut that rely on septic systems and do not use the buildable square zoning tool to design building lots. The advantage of the buildable square tool is that it eliminates wetlands from where the building and septic system will be installed. Adoption of the buildable square tool by these municipalities could be expected to reduce the number of applications in those municipalities that impact wetlands and, by extension, alleviate the workload of volunteer inland wetland commissions. Pre-application reviews can further

³³ While many variables may influence the time devoted to wetlands review and approvals, the sample size used in this study, coupled with normalizing the comparison to suburban and rural municipalities provides evidence that the buildable square tool is an important wetland protection tool. It is also important to note the average number of building permits issued in 2022 in municipalities with buildable square zoning regulations (21.2 permits) was greater than the average for those without such regulations (16.5 permits) – a strong indication that the differences in wetland workload were not influenced by higher building permit activities between these two groups. Indeed, the results show just the opposite (see Table 7). See the WestCOG study, *The Buildable Square: An Innovative Way to Protect Wetlands and Reduce Septic System Failures*.

reduce potential wetlands impacts (and associated workload) when used in conjunction with a buildable square.

Regional or Shared Commissions

The Connecticut Inland Wetland statutes authorize multi-town approaches to the management of inland wetlands under Section 22a42 (e) as follows:

“Any municipality, pursuant to ordinance, may act through the board or commission authorized in subsection(c) of this section to join with any other municipalities in the formation of a district for the regulation of activities affecting the wetlands and watercourses within such district. Any city or borough may delegate its authority to regulate inland wetlands under this section to the town in which it is located.”³⁴

A regional or multi-town approach offers many benefits especially for smaller municipalities with limited application volume, smaller budgets and staffs, and a small pool of potential volunteers. The protection of wetland resources, which is an unfunded mandate on municipalities to enforce state regulation, does not raise the same concerns often found in planning and zoning (which is a grant of local control). Protecting wetlands is a public good that transcends municipal boundaries. In contrast, there is less interest for municipal governments to cede land use controls to a regional or state agency.

Professionalization at the Regional or State Level

Given the range of challenges of managing inland wetlands with volunteer commission members with limited training and wetland science experience, several management alternatives should be given consideration to improve the process. From a business perspective, the practices Connecticut applies to inland wetlands puts it at a disadvantage compared to other states that manage inland wetlands as a state responsibility. Connecticut’s 169 municipalities rely on 1,104 volunteer members and 333 alternate members (1,437 total volunteers) to accomplish what might otherwise be undertaken by a small cadre of professional staff. Vermont’s approach to inland wetland regulations is an example that has merit. Vermont manages wetland impacts through a state level program implemented with only seven staff working through four regional wetland offices.

Independent Wetlands Professionals

As noted above, another option is to establish training or certification standards for inland wetland agents to professionalize and expand their role. Under such an approach, agents could function in an analogous fashion to that of the Licensed Environmental Professional program that authorizes environmental scientists meeting stringent training and professional standards to evaluate and verify the remediation of sites with hazardous waste. Wetland professionals licensed under an analogous program could be employed or retained as independent contractors by municipalities, instead of volunteer commissions, to manage inland wetland applications. Professionalizing the handling of inland wetlands applications in this manner could improve technical expertise in application reviews; improve efficiency, predictability, and, potentially the cost, associated with the review process, and reduce legal risk associated with the enforcement of wetlands regulations for municipalities.

Note that any of these options – shared staff, a regional/state approach or the use of professional staff – could be hybridized. For instance, the role of the inland wetlands agent could be upgraded to handle

³⁴ Chapter 440, Wetlands and Watercourses, Section 22a-42(e).

a broader range of responsibilities than currently allowed by Connecticut's inland wetlands and watercourses statute, while leaving volunteer commissions in place; the agent could be a municipal, shared, or regional employee, or could be an independent contractor. Under such an arrangement, the purpose of the commission may evolve to facilitating input on projects with significant and public impacts, rather than administrative processing of applications.

CONCLUSIONS

State law assigns responsibility for ensuring the inland wetlands regulations to untrained volunteers. Given the importance of wetlands resources to the state's environment, this is a curious choice, and it is one that may not be the best approach to ensure the state's interest in protecting these resources.

This paper identifies strategies that may improve the efficiency, consistency, and predictability in the inland wetlands review process in Connecticut. These include adoption of a buildable square standard, implementation of clear standards for impacts, authority for local inland wetlands agents for administrative approvals of uncomplicated applications, and licensing of wetlands scientists, whether local, regional, or independent, that can ensure that applications are processed with the necessary technical expertise and accountability established under a state sponsored licensed wetland professional program.

Unlike other New England states that have protected riparian corridors from development, Connecticut's upland review area is not being used as a riparian buffer zone but as a de-facto development zone – an approach that is inconsistent with the ecosystem services that buffer zones provide to the state's river systems. Furthermore, consistent approaches to the protection of the state's inland wetlands requires a commitment of financial and staff resources for the Connecticut Department of Energy and Environmental Protection. Without such resources, it is not possible to establish a consistent application of the state's inland wetlands and watercourse statute.

Regardless of the strategy or strategies chosen, a more professional approach to managing the state's inland wetland resources, coupled with revisions to the Connecticut inland wetlands and watercourses regulations, should be seriously considered based on the findings of this investigation.

RECOMMENDATIONS FOR IMPROVING WETLANDS PRACTICES

Municipal Inland Wetlands Enforcement Program

1. Reduce wetland violations by municipal adoption of corrective action fee schedules as a standard practice across Connecticut.
2. Establish statewide uniform fee schedules for corrective actions associated with unpermitted wetlands that vary by the type and severity of the impacts.

Municipal Wetlands Training and Professional Credentials

3. Require all municipal inland wetlands agents to take the U.S. Army Corps of Engineers 40-hour training program that includes field identification and delineation of wetlands based on the Connecticut definition for wetlands.
4. Expand the role of the professionally trained inland wetlands agent to assume greater responsibility for minor and so-called moderate wetlands impacts applications.
5. Encourage the legislature to establish minimum wetlands training for all commission members as a condition of appointment to their post.
6. Provide meeting management training to all inland wetlands commission members.

Municipal Inland Wetlands Administration

7. To minimize cancelled meetings, encourage municipalities to reduce the size of inland wetlands commissions from seven to five members including two or three alternates. Providing for alternate members creates an “on the job” training opportunity useful for the long-term maintenance of institutional knowledge for the commission.
8. Reduce the instability of wetland commission membership and improve institutional knowledge, extend the terms of office from three or four years – the prevailing practice today – to six years.
9. Provide municipal incentives for volunteerism such as specified tax abatements for years served, improved municipal recognition of service rendered, and more flexible standards for absenteeism for cause shown.

State Inland Wetlands Program Improvements

10. Revise inland wetlands regulations across Connecticut to distinguish between minor, moderate and significant wetlands impacts using the approach developed by Norwalk and Wilton.
11. Encourage CTDEEP to develop a guidebook to standardize the interpretation of minor, moderate and significant wetlands impact projects to achieve a consistent approach to the wetlands review and permitting process.
12. Restore the level of staffing and funding for the state inland wetlands program to ensure consistent implementation of municipal permit procedures and standards.
13. Encourage the state legislature to transform the upland review area into a riparian corridor buffer zone with regulatory authority to prohibit septic systems installed within 100 feet of rivers and streams.
14. Revise the model Connecticut Inland Wetlands regulations to require – rather than allow – all minor wetlands impacts to be managed by a properly trained inland wetlands agent.

Wetlands Avoidance Strategies

15. Encourage municipal zoning commissions to adopt the buildable square or rectangle tool as a means to minimize future impacts to the state's wetlands.
16. Expand state and municipal support for the role of the inland wetlands agent function to enable dramatic expansion of staff time devoted to the pre-application review process – rather than the mere acceptance of wetland applications.
17. Establish wetlands avoidance strategies as a foundational element of the inland wetlands program.
18. Encourage the state legislature to authorize CTDEEP to create classes of inland wetlands that recognizes the importance of fully protecting the highest value wetlands within the state from any development similar to the approach taken in Vermont.

Dual Purpose Commissions

19. Divest the Inland Wetlands commissions of additional unfunded state mandates and workloads that diminish the effective management of the wetland permit program across Connecticut.
20. Establish funded environmental professionals at the regional level (e.g., COGs) to assume the duties of technically complex program such as stormwater management, aquifer protection, erosion and sedimentation control and similar environmental duties that benefit from management by highly trained staff.

Alternative Approaches to Regulating Inland Wetlands

21. Consolidate inland wetlands permit programs at the regional or state level based on the use of wetlands professionals operating under a state sponsored licensed wetland professional program analogous to the licensed environmental program.
22. Alternatively, encourage multi-town consolidation of inland wetlands functions amongst municipalities with limited fiscal resources and limited wetlands permit requests.
23. Alternatively, develop a licensed wetlands professional program to upgrade the current role served by the municipal inland wetlands agent.

APPENDICES

Appendix 1: Wilton Inland Wetland and Watercourses Regulations (2007)

“**Regulated Activity**” means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands and watercourses, but shall not include the specified activities in section 4 of these Regulations.

Furthermore, any clearing, grubbing, filling, grading, paving, excavating, construction, depositing or removal of material and discharging of stormwater on the land within one hundred (100) feet of a wetland or within one hundred (100) feet of a watercourse is a regulated activity. The Commission may rule that any other activity located within such upland review area or in any other non-wetland or non-watercourse area is likely to impact or affect wetlands or watercourses and is a regulated activity.

“Regulated activities” are considered Minor, Intermediate and Significant as defined below:

1. “**Minor Regulated Activity**” means those activities which would result in no greater than a minimal impact on any wetland or watercourse. Additionally, the following shall apply:

a. No activity shall be considered Minor Regulated Activity unless it occurs solely within the regulated area exclusive of a wetland or watercourse.

b. No septic installation or activity requiring the deposition or removal of more than 100 cy of material shall be considered a Minor Regulated Activity.

2. “**Intermediate Regulated Activity**” means:

a) Any operation within or use of a wetland, watercourse, or regulated area within the Town of Wilton involving removal or deposition of less than 100 cy of materials, placement of any obstruction, construction, alteration or pollution of such wetlands, watercourses or regulated area, but shall not include the activities specified in Section 4 of these regulations;

b) Locating any waste disposal system or any portion thereof including, without limitation, curtain drains, berms and fill within regulated areas;

c) Permanent outdoor or underground storage of petroleum based products in excess of 100 gallons for residential, commercial or industrial uses within the regulated areas; and

d) Clearcutting or grubbing in a wetland or regulated area, except as permitted in Section 4 of these Regulations.

3. “**Significant Regulated Activity**” means any activity including, but not limited to, the following activities, which may have a substantial effect on any regulated area.

a) Any activity involving a deposition or removal of material which will or may have a substantial effect on any regulated area, inland wetland or watercourse. Any activity involving more than 100 cy will be considered a Significant Regulated Activity.

In cases where excavation is proposed for the purpose of constructing a foundation, the applicant shall only consider 50% of the excavated volume for portions of the foundation more than 25 feet from a wetland and/or 50 feet from a watercourse; or

b) Any activity which substantially changes the natural channel or may inhibit the natural dynamics of a watercourse system; or

c) Any activity which substantially diminishes the natural capacity of an inland wetland, watercourse, or regulated area to provide flood control, to support desirable fisheries, wildlife, or other biological life; or to supply water, assimilate waste, facilitate drainage, provide recreation or open space; or to perform other functions; or

d) Any activity which causes substantial turbidity, siltation or sedimentation, and or thermal pollution in a wetland, watercourse or regulated area; or

e) Any activity which causes a substantial change of flow of a natural watercourse or the groundwater levels of the regulated area; or

f) Any activity which causes or has the potential to cause pollution of a wetland, watercourse or regulated area; or

g) Any activity which destroys unique wetlands, watercourses, or regulated areas having demonstrable scientific or educational value.

Appendix 2: Data Tables

Table 1: Permits for Development in the Upland Review Area for Seven Municipalities in Western Connecticut (2022)

Specific Projects approved in Upland Review Area	General Development Concepts	Code	Greenwich	Wilton	New Canaan	New Milford	Ridgefield	Danbury	Bethel	Total
Construct Studio	Accessory Bldgs.	CS	1							1
Elevator Shaft	House Construction Work	ES	1							1
Patio/Terrace	Patio, Pool & Amenities	PT	16	2	8					26
Pools	Patio, Pool & Amenities	P	10	1	9	1		1	1	23
Septic System Reserve	Septic Repair, Replace	SR	18		9	1		1		29
Demolish Dwelling	House Construction Work	DD	5		4					9
Elevate Dwelling	House Construction Work	ED	1							1
Install Septic System	Septic Repair, Replace	IS	3							3
Install Spa	Patio, Pool & Amenities	ISP	1		1	1				3
Modify Driveway	Driveways & Walking Paths	MD	6	3	10					19
Buffer Enhancements	Environmental protection	BE	1		2					3
Cabana	Patio, Pool & Amenities	C	1		1					2
Tree Removal	Tree Removal	TR	1	8	2			2		13
Porch Expansion	House Construction Work	PE	1	1	3					5
Gravel Parking	Driveways & Walking Paths	GP	1		1					2
Rain Garden	Environmental protection	RG	1		1	1				3
Observation Pavilion	Accessory Bldgs.	OP	1							1
Dwelling Addition	House Construction Work	DA	10	1	9	2		2		24
Fire Pit	Patio, Pool & Amenities	FP	3							3
Deck	Patio, Pool & Amenities	DK	4	4	6	4	1	1		20
Construct Garage	Accessory Bldgs.	CG	1		1					2
Demolish Garage	Accessory Bldgs.	DG	5							5
Construct Wall	Walls and Fences	CW	2	1	5			1		9
Replace/install Fence	Sports Related Projects	RF	3		4					7
Tennis Building	Sports Related Projects	TB	1							1
Shed	Accessory Bldgs.	S	2	1		5		1	1	10
Generator	Utility Related Work	G		4	2					6
Outdoor Kitchen	Patio, Pool & Amenities	OK		1						1
Propane Tank	Utility Related Work	PRT		7	3					10
Gravel Path	Driveways & Walking Paths	GPA		1						1
Remove/Replace Bridge	Bridge work	RBOS		1	1					2
Baseball Field Repairs	Sports Related Projects	BBF		1						1
Storm Discharge System	Environmental protection	SDP		1	22					23
Earthwork Corrective Action	Environmental protection	EWCA		1						1
Gazebo	Patio, Pool & Amenities	GZ		1						1
Sauna	Patio, Pool & Amenities	SAU		1						1
Playground	Sports Related Projects	PLG		1						1
Construct Garage Addition	House Construction Work	CGA		1						1
Heat Pump	Utility Related Work	HP		2						2
Concrete slab	Accessory Bldgs.	CSL		2						2
Pergola	Patio, Pool & Amenities	PERG		1	1					2
Dwelling Renovation	House Construction Work	DR			1					1

Specific Projects approved in Upland Review Area	General Development Concepts	Code	Greenwich	Wilton	New Canaan	New Milford	Ridgefield	Danbury	Bethel	Total
Barn	Accessory Bldgs.	B			3	1				4
Powerline Relocation	Utility Related Work	PLR			1					1
Pickle Ball Court	Sports Related Projects	PKC			1					1
Remove Tennis Court	Sports Related Projects	RTC			1					1
Sports Court	Sports Related Projects	SC			1					1
Public Water Works	Utility Related Work	PWW			1					1
Water Lines	Utility Related Work	WL			1					1
Underground Utilities	Utility Related Work	UU			1					1
Stairs	House Construction Work	STR				1				1
Cleanup of Debris	Environmental protection	CUD						1		1
Total Projects			100	48	119	17	1	10	2	297
Total Permit Approvals			55	45	34	15	1	8	2	160
Projects/Permit Approval			1.8	1.1	3.5	1.1	1.0	1.3	1.0	1.9

Note: Norwalk approved 38 inland wetlands permits in the upland review area but details concerning the projects approved were not available at the time of publication. Source: WestCOG staff analysis of the inland wetlands and watercourse regulations in Western Connecticut, July 2023.

Table 2: Projects for Development in the Upland Review Area in Seven Municipalities of Western Connecticut (2022)

Approved Work in Upland review Area	Total	% of total
Accessory Buildings	25	8.4%
Bridge work	2	0.7%
Environmental protection	31	10.4%
Patio, Pool & Amenities	82	27.6%
Tree Removal	13	4.4%
Walls and Fences	9	3.0%
House Construction Work	43	14.5%
Septic Repair, Replace	32	10.8%
Driveways & Walking Paths	22	7.4%
Utility Related Work	22	7.4%
Sports Related Projects	16	5.4%
Grand Total	297	100.0%

Note: The 297 projects fell within the 160 permit applications approved by the municipal inland wetland agent under the administrative approval authority granted by the inland wetland commission.

Table 3: Average Attendance, Authorized Members and Total Application Events Received by Inland Wetland Commissions in Western Connecticut (2022)

Municipality	Average Attendance in 2022	Authorized Membership	Total Application Events in 2022	% Authorized Members
Bethel	4.8	5.0	24	96.0%
Bridgewater	5.8	7.0	32	82.1%
Brookfield	3.9	5.0	151	78.3%
Danbury	4.5	7.0	87	63.9%
Darien	6.3	7.0	83	90.1%
Greenwich	6.6	7.0	147	94.0%
New Canaan	6.3	7.0	69	90.5%
New Fairfield	5.5	7.0	63	78.6%
New Milford	6.4	7.0	111	90.9%
Newtown	5.1	7.0	49	73.4%
Norwalk	5.6	7.0	88	80.2%
Redding	5.8	7.0	43	82.5%
Ridgefield	5.5	7.0	95	78.6%
Sherman	6.2	7.0	84	89.0%
Stamford	4.8	5.0	59	96.0%
Weston	4.8	7.0	28	69.2%
Westport	5.0	7.0	184	71.4%
Wilton	5.2	7.0	137	74.1%
Average	5.5	6.7	85.2	81.8%

Table 4: Total Hours Spent on Inland Wetland Commission Meetings by Municipalities with and without Buildable Square Regulations Excluding Wetlands (2022)

Municipality	Do NOT Use Buildable Square	Use Buildable Square	All municipalities
Bolton		9.7	9.7
Bridgewater		4.8	4.8
Brookfield	39.5		39.5
Burlington		8.7	8.7
Canton	30.6		30.6
Chaplin		5.9	5.9
Colchester		5.0	5.0
Columbia		14.4	14.4
Cornwall		9.1	9.1
Coventry		28.4	28.4
Deep River		15.1	15.1

Municipality	Do NOT Use Buildable Square	Use Buildable Square	All municipalities
East Haddam	8.7		8.7
Easton	21.5		21.5
Ellington		5.6	5.6
Essex		27.5	27.5
Glastonbury	26.7		26.7
Goshen		12.3	12.3
Granby		18.8	18.8
Haddam		7.5	7.5
Hartland		8.9	8.9
Killingworth		4.9	4.9
Lebanon		18.1	18.1
Lisbon		5.2	5.2
Madison		32.3	32.3
Montville	14.2		14.2
New Fairfield	9.9		9.9
New Hartford	7.5		7.5
New Milford		21.2	21.2
Newtown		23.1	23.1
North Stonington	5.4		5.4
Old Saybrook		13.3	13.3
Oxford		13.0	13.0
Prospect	14.1		14.1
Redding		18.0	18.0
Ridgefield	39.9		39.9
Roxbury		16.3	16.3
Salem	17.4		17.4
Sherman	13.3		13.3
Thompson		21.5	21.5
Tolland		8.9	8.9
Union		1.0	1.0
Watertown	11.9		11.9
Weston	20.7		20.7
Wilton	27.4		27.4
Woodbridge	9.6		9.6
Woodbury	42.7		42.7
Woodstock	20.2		20.2
Average	20.1	13.5	16.2

Tale 5: Summary of Wetland Commission Functions, Membership and Term Limits for Connecticut Municipalities: 2023

Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
Andover	5	No	2	BOS (4); PZC (1)	3		None	Yes	Yes	3	Yes	4	
Ansonia	7	No	2	Mayor; consent of BOA; CC (3); PC (2)			None	Yes	Yes	NA	No		
Ashford	7	No	4	BOS	2		None	Yes	Yes	4	No		
Avon	7	No	4	TC	0		None	Yes	Yes	NA	NS		
Barkhamsted	7	No	2	BOS	2		None	Yes	Yes	2	No		
Beacon Falls	7	No	4	BOS; PZC (1)	0		APA, SMA, SEC	Yes	Yes	NA	Yes	3	
Bethany	5	No	3	BOS	2		None	Yes	Yes	3	No		
Berlin	7	No	3	TC	2		APA	Yes	Yes	3	No		
Bethel	5	No	4	Elected	2		None	Yes	Yes	4	No		
Bethlehem	7	No	3	BOS	3		None	Yes	Yes	3	No		
Bloomfield	9	No	2	TC (7); PZC (2)	0		None	Yes	Yes	NA	No		
Bolton	5	No	3	BOS	1		None	Yes	Yes	3	Yes		Repeat absence
Bozrah	7	Yes	3	BOS	2		None	Yes	Yes	3	NS		
Branford	7	No	3	BOS	3		None	Yes	Yes	3	Yes	4	
Bridgeport	9	No	3	Mayor with 60% of CC	3	Yes	PZC	Yes	Yes	3	No		
Bridgewater	7	Yes	5	CE	2		None	Yes	Yes	5	No		
Bristol	7	Yes	3	Mayor; consent of CC	3		None	Yes	No	3	NS		
Brookfield	5	No	2	BOS	3		None	Yes	Yes	2	Yes	4	

Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
Brooklyn	7	No	3	BOS	3		None	No	No	3	No		
Burlington	7	No	4	BOS	3		None	Yes	Yes	2	No		
Canaan	5	Yes	5	CE	1		None	Yes	Yes	5	No		
Canterbury	7	No	3	BOS	0		APA	Yes	Yes	NA	No		
Canton	5	No	4	BOS	2		None	Yes	Yes	2	No		
Chaplin	5	Yes	6	BOS	3		None	Yes	Yes	6	NS		
Cheshire	7	No	4	TC	0		None	Yes	Yes	NA	No		
Chester	7	No	4	BOS	0		None	Yes	Yes	NA	No		
City of Groton	5	Yes	3	Mayor	2		None	Yes	Yes	3	No		
Clinton	7	No	4	BOS	3		None	Yes	Yes	4	No		
Colchester	7	Yes	3	BOS	3		None	Yes	Yes	3	No		
Colebrook	5	No	3	BOS	3		None	Yes	Yes	3	No		
Columbia	7	No	4	BOS	2		None	Yes	Yes	2	NS		
Cornwall	5	No	2	BOS	2		None	Yes	Yes	2	No		
Coventry	5	No	3	TC	2		APA	Yes	Yes	3	No		50%
Cromwell	7	No	4	TC	2		None	Yes	Yes	4	Yes		
Danbury	7	No	3	Mayor/CC	3		EPC	Yes	Yes	3	Yes	3	
Darien	7	No	3	BOS	0		None	Yes	Yes	3	No		
Deep River	7	Yes	3	BOS	2		Canfield Woods	Yes	Yes	3	No		
Derby	5	No	3	Mayor	2		None	No	No	3	Yes		
Durham	7	No		BOS	0		None	Yes	Yes	NA	No		
East Haven	5	No	3	Mayor	3		None	No	No	3	Yes	4	
East Granby	7	Yes	5	BOS	0		None	No	No	NA	No		
East Haddam	5	No	2	BOS	2		None	Yes	Yes	2	No		

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Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
East Hampton	7	No	3	TC	2		None	Yes	Yes	3	No		
East Hartford	7	No	4	Mayor; consent of TC	3		EPC	Yes	Yes	4	No		
East Lyme	7	No	4	BOS	3		None	Yes	Yes	4	No		
East Windsor	5	No	4	BOS	1		None	Yes	Yes	4	No		
Eastford	7	No	2,3,5	BOS (5); PC(1) BOSD (1)	2		None	Yes	Yes	3	Yes	3	
Easton	7	No	4	BOS	2		None	Yes	Yes	4	No		
Ellington	7	No	4	BOS	2		None	Yes Modified	Yes	4	No		
Enfield	7	No	4	TC	3		None	Yes	Yes	4	No		
Essex	5	No	3	FS & TM	2		None	Yes	Yes	3	NS		
Fairfield	7	Yes	5	FS	3		None	Yes	Yes	5	No		
Farmington	7	Yes	4	TC	2		None	Yes Modified	Yes	4	Yes		3 in 6 mos.
Franklin	5	No	4	BOS	3		None	Yes	Yes	4	No		
Glastonbury	7	Yes	4	TM	0		None	Yes	Yes	4	No		
Goshen	7	No	3	BOS	0		None	Yes	Yes	3	NS		
Granby	7	No	4	BOS	0		None	Yes	Yes	4	No		
Greenwich	7	No	4	BOS and RTM	3		None	Yes	Yes	4	No		
Griswold	5	Yes	4	BOS	3		None	Yes	Yes	2	Yes		50%
Groton	5	No	2	TC	2		None	No	No	2	No		
Guilford	7	No	4	BOS (2 from PZC & CC)	3		None	Yes	Yes	4	No		
Haddam	7	No	3	BOS	2		None	Yes	Yes	3	Yes		60%

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Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
Hamden	11	No	3	Mayor; consent of LC	0		None	Yes	Yes	NA	No		
Hampton	7	No	3	BOS	2		None	Yes	Yes	3	Yes	4	
Hartford	7	No	3	Mayor	3	Yes	PZC	Yes	Yes	3	No		
Hartland	7	No	5	BOS	3		None	Yes	Yes	5	NS		
Harwinton	7	No	3	BOS	2		None	Yes	Yes	3	Yes		
Hebron	5	Yes	4	BOS	2		None	Yes	Yes	4	Yes	3	
Kent	5	No	5	FS	2		FP	Yes	Yes	5	No		
Killingly	5	No	3	TC	3		None	Yes	Yes	2	No		
Killingworth	7	No	3	BOS	0		None	Yes	Yes	3	Yes	3	
Lebanon	9	No	3	BOS	0		None	Yes	Yes	3	No		
Ledyard	5	No	2	TC	4		None	Yes	Yes	2	Yes	3	
Lisbon	5	Yes	2	BOS	2		None	Yes	Yes	2	No		
Litchfield	7	No	3	BOS	2		None	Yes	Yes	1	No		
Lyme	7	Yes	3	BOS	2		None	Yes	Yes	3	No		
Madison	7	No	4	BOS	3		None	Yes	Yes	4	No		
Manchester	7	No	5	BOD	0	Yes	PZC, APA	Yes	Yes	NA	No		
Mansfield	9	No	6	Elected	3	Yes	PZC	Yes	Yes	2	Yes	3	
Marlborough	5	Yes	3	BOS	3		None	Yes	Yes	3	No		
Meriden	7	No	3	CC; PC (1)	0		None	No	No	NA	No		
Middlebury	7	Yes	4	FS	0		None	Yes	Yes	NA	No		
Middlefield	7	No	3	BOS	3		None	Yes	Yes	3	No		
Middletown	10	No	3	Mayor; consent of CMC	5		None	Yes	Yes	5	Yes		

Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
Milford	9	No	2	BOA (4); Mayor (4); PZC (1)	2		None	Yes	Yes	2	No		
Monroe	7	No	4	FS	0		None	Yes	Yes	NA	No		
Montville	7	No	4	TC	2		None	Yes	Yes	4	No		
Morris	5	No	3	BOS	1		None	Yes	Yes	3	No		
Naugatuck	5	No	4	Mayor & Burgesses	2		None	Yes	Yes	4	Yes		
New Britain	7	No	2	Mayor	3		CP	No	No	3	No		
New Canaan	7	No	2	BOS	3		FCB	Yes	Yes	2	Yes	3	
New Fairfield	7	Yes	3	BOS	2		None	Yes	Yes	3	No		
New Hartford	7	No	3	BOS	2		None	Yes	Yes	3	No		
New Haven	7	Yes	4	Mayor (4); Mayor (1); CEG (1); BOA (1)	0	Yes	ZC, CP	Yes	Yes	NA	No		
New London	5	Yes		CM	2		None	Yes	Yes	2	No		
New Milford	7	No	4	TC	3		None	Yes Modified	Modified Yes	4	Yes	3	
Newington	7	Yes	4	TC	3		None	Yes	Yes	4	No		
Newtown	7	No	4	BOS	0		APA, FP	Yes	Yes	4	No		
Norfolk	5	No	3	Elected	2		None	Yes	Yes	3	No		
North Branford	5	Yes	2	TC with 1 from PZC	2		None	Yes	Yes	2	Yes	3	
North Canaan	7	Yes	2, 4, 6	BOS	0		None	Yes	Yes	NA	No		
North Haven	7	No	4	BOS	3		None	Yes	Yes	4	No		
North Stonington	7	No	5	BOS	0		None	Yes	Yes	5	No		
Norwalk	7	Yes	5	Mayor/CMC	3		None	Yes Modified	Yes	5	No		

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Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
Norwich	7	No	3	CM; consent of CC	3		None	Yes	Yes	3	No		
Old Lyme	7	No	3	BOS	2		None	Yes	Yes	3	No		
Old Saybrook	7	No	2	BOS (3) CTC (1); PC (1); ED (1); ZC (1)	3		None	Yes	Yes	2	No		
Orange	7	No	4	FS	0		None	Yes	Yes	NA	No		
Oxford	5	Yes	3	BOS	0		None	Yes	Yes	3	No		
Plainfield	7	No	4	BOS	0		None	Yes	Yes	NA	Yes		3 unexcused
Plainville	7	No	2	TC	3		None	Yes	Yes	2	No		
Plymouth	5	Yes	3	TC	2		None	Yes	Yes	3	Yes		
Pomfret	7	No	3	BOS; includes PC (1); NECOG (1); CMC (2); BOS (1)			None	Yes	Yes		No	4	
Portland	5	No	4	BOS	2		None	Yes	Yes	4	No		
Preston	7	No	6	FS	2		None	No	No	6	No		
Prospect	5	No	3	TC	3		None	Yes	Yes	2	No		
Putnam	7	Yes	5	FS for Members; BOS Alternates	3		None	Yes	Yes	5	No		
Redding	7	Yes	4	FS	0		None	Yes	Yes	4	No		
Ridgefield	7	No	4	Elected	0		None	Yes Modified	Yes	4	Yes		66%
Rocky Hill	7	Yes	2	TC	3		None	Yes	Yes	4	No		
Roxbury	5	No	4	BOS	3		None	Yes	Yes	4	NS		
Salem	7	Yes	6	BOS	3		None	Yes	Yes	6	No		

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Salisbury	7	No	4	BOS	3		None	Yes	Yes	2	No		
Scotland	5	No	3	BOS	3			No	No	3	No		
Seymour	5	No	4	FS	2		None	Yes	Yes	2	No		
Sharon	7	No	5	BOS	2		None	No	No	5	Yes		
Shelton	7	No	5	Mayor	2		None	No	No	2	No		
Sherman	7	No	4	BOS	3		None	Yes	Yes	4	NS		
Simsbury	7	Yes	4	BOS	2		FP	Yes	Yes	4	No		
Somers	7	Yes	4	BOS with ZC (1); PC (2); WPCA (1)	2		None	Yes	Yes	1	No		
South Windsor	9	Yes	4	TC	2		None	Yes	Yes	4	Yes		75% in 6 mos.
Southbury	6	No	4	BOS	3		None	Yes	Yes	4	No		
Southington	7	Yes	3	TM	0		None	Yes	Yes	NA	No		
Sprague	5	No	5	BOS	2		None	Yes	Yes	5	No		
Stafford	7	No	2	BOS	3		None	Yes	Yes	2	No		
Stamford	5	Yes	3	Mayor	3		EPC, FECB	Yes	No	3	No		
Sterling	7	No	3	BOS	2		None	Yes	Yes	3	No		
Stonington	5	No	3	BOS	2		None	Yes	Yes	3	No		
Stratford	7	No	4	Chair TC	2		None	Yes Modified	Yes	4	No		
Stratford	7	No	4	Chair TC	2		None	Yes	Yes	4	No		
Suffield	7	Yes	4	BOS	2		None	No	No	4	No		
Thomaston	5	Yes	5	BOS	3		None	Yes	Yes	3	No		
Thompson	5	No	5	BOS	2		None	Yes	Yes	5	Yes	4	
Tolland	5	No	2	BOS	2		None	Yes	Yes	3	No		

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Municipality	Authorized Membership	Combined with Conservation Commission	Terms of Office	Appointing Authority	Number of Alternates	Serves as PZC?	Other Functions	Agent Approvals: Minimal Impact Projects	Require DEEP Training of Agent	Alternates Term of Office	Removal if Meetings Missed	Removal if Consecutive meetings Missed	Other Missed Meeting Grounds for Removal
Torrington	7	No	3	Mayor; consent of CC	0		None	Yes	Yes	NA	Yes		
Trumbull	7	No	3	FS with approval of TC	3		None	Yes	Yes	3	Yes	4	
Union	5	No	6	Elected	3	Yes	PZC	Yes	Yes	6	No		
Vernon	5	No	3	Mayor	2		None	Yes	Yes	3	No		
Voluntown	5	No	4	BOS	2		None	Yes	Yes	2	No		
Warren	5	Yes	3	FS	2		None	Yes	Yes	3	No		
Washington	5	No	3	BOS (3); ZC (1); PC (1) CC(2) PRC (1)	3		None	Yes	Yes	3	No		
Waterbury	5	No	4	Mayor	0		None	Yes	Yes	NA	No		
Waterford	7	Yes	5	FS	3		None	No	No	5	No		
Watertown	7	Yes	3	TC	3		None	Yes	Yes	3	No		
West Hartford	9	No	5	TC	3	Yes	PZC, TC	Yes	Yes	5	No		
West Haven	5	No	5	Mayor; consent of TC	3		None	Yes	Yes	2	No		
Westbrook	7	No	2	BOS	4		None	Yes	Yes	2	No	4	
Weston	7	Yes	4	BOS	0		None	Yes	Yes	3	Yes	3	
Westport	7	Yes	4	FS	3		None	Yes	Modified Yes	2	No		
Wethersfield	9	Yes	3	TC	2		None	No	No	3	No		
Willington	5	No	3	BOS	2		APA	Yes	Yes	NA	No		
Wilton	7	No	3	BOS	0		None	Yes Modified	Yes	3	No	3	
Winchester	9	No	3	BOS	0		None	Yes	Yes	NA	No		
Windham	5	Yes	4	TC	3		None	Yes	Yes	4	No		

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Windsor	7	No	4	TC	3		None	Yes	Yes	4	NS		
Windsor	9	No	4	TC	2		APA	Yes	Yes	4	No		
Wolcott	7	Yes	2	Mayor; consent of TC	3		None	Yes	Yes	2	NS		
Woodbridge	5	No	4	BOS	2		None	Yes	Yes	4	Yes	3	
Woodbury	5	No	4	Elected	3		None	Yes	Yes	4	Yes		66%
Woodstock	5	No	4	BOS	2		None	Yes	Yes	4	No		
Total	1104	46		81	333	7	147	149	152		35	9	
Average	6.5		3.5		2.0					3.3		3.4	

Abbreviations

BOA = Board of Aldermen
 BOD = Board of Directors
 BOS = Board of Selectmen
 CC= City Council
 CE = Chief Executive
 CEG = City Engineer
 CM = City Manager
 CMC = Common Council
 CP = City Planning
 CTC = Conservation Commission

ED = Economic Development Commission
 EPC = Environmental Protection Commission
 FCB = Flood Control Board
 FECB = Flood & Erosion Control Board
 FP = Forest Practices Regulations
 FS= First Selectman
 LC = Legislative Council
 NS = Not Specified

PC = Planning Commission
 PZC = Planning and Zoning Commission
 PRC = Parks & Recreation Commission
 RTM = Representative Town Meeting
 SEC = Soil Erosion Control
 SMA= Stormwater Management Agency
 TC = Town Council; TM = Town Manager
 WPCA = Water Pollution Control Authority
 ZC = Zoning Commission

Table 6: Summary of Inland Wetland Administration in Sixty Connecticut Municipalities with and without Buildable Square Standards in Zoning to Protection Wetlands and Reduce System Failures: 2022

COG Region	Buildable Square	Municipality	Date	No. of Regular Meetings Held	No. of Site Visits	Special Meetings	Elapsed Time	Average Attendance in 2022	Authorized Membership	% of Authorized members in 2022	Applications	Public Hearings	Enforcement Issues	Total Application Events	Agent Approved Projects in WestCOG	Urban Status
WestCOG	No	Bethel	2022	8	3	1	17:08:00	4.8	5	96.0%	20	4	0	24	2	Urban
CRCOG	Yes	Bolton	2022	12	0	0	9:40:00	3.5	5	70.0%	12	0	4	16		Suburban
SCCOG	Yes	Branford	2022	11	5	3	40:08:00	5	7	71.4%	49	2	38	89		Urban
WestCOG	Yes	Bridgewater	2022	12	0	0	4:45:00	5.8	7	82.1%	30	0	2	32	0	Rural
WestCOG	No	Brookfield	2022	22	0	1	39:28:00	3.9	5	78.3%	114	0	37	151	0	Suburban
NHCOG	Yes	Burlington	2022	10	0	1	8:40:00	5.5	7	77.9%	14	4	4	22		Suburban
CRCOG	No	Canton	2022	10	3	1	30:37:00	4.2	5	84.3%	32	6	9	47		Suburban
NECOG	Yes	Chaplin	2022	7	1	0	5:52:00	4.5	5	90.0%	11	0	0	11		Rural
SECOG	Yes	Colchester	2022	7	0	0	4:59:00	5	7	71.4%	49	2	38	17		Suburban
CRCOG	Yes	Columbia	2022	10	9	0	14:26:00	5.3	7	75.7%	65	0	1	66		Suburban
NHCOG	Yes	Cornwall	2022	9	3	0	9:08:00	4.6	5	91.7%	37	0	16	53		Rural
CRCOG	Yes	Coventry	2022	11	0	2	28:24:00	3.5	5	69.2%	56	4	21	81		Suburban
WestCOG	No	Danbury	2022	16	0	1	8:15:00	4.5	7	63.9%	70	0	17	87	8	Urban
WestCOG	No	Darien	2022	10	0	2	22:41:00	6.3	7	90.1%	76	7	0	83	0	Urban
RiverCOG	Yes	Deep River	2022	9	0	2	15:06:00	4.5	7	64.9%	19	0	27	46		Suburban
RiverCOG	No	East Haddam	2022	11	2	0	8:43:00	4.1	5	81.8%	60	1	14	75		Rural
Metro COG	No	Easton	2022	17	1	1	21:30:00	6.4	7	91.0%	75	0	83	158		Suburban
CRCOG	Yes	Ellington	2022	8	0	2	5:33:00	5.6	7	80.0%	9	10	0	19		Suburban
RiverCOG	Yes	Essex	2022	9	5	1	27:32:00	4.8	5	96.0%	25	7	5	37		Suburban
CRCOG	No	Farmington	2022	19	2	0	34:48:00	6.6	7	94.6%	64	7	3	74		Urban
CRCOG	No	Glastonbury	2022	16	1	0	26:39:00	5.4	7	76.5%	36	0	5	41		Suburban

COG Region	Buildable Square	Municipality	Date	No. of Regular Meetings Held	No. of Site Visits	Special Meetings	Elapsed Time	Average Attendance in 2022	Authorized Membership	% of Authorized members in 2022	Applications	Public Hearings	Enforcement Issues	Total Application Events	Agent Approved Projects in WestCOG	Urban Status
NHCOG	Yes	Goshen	2022	12	1	0	12:15:00	5.2	7	74.7%	68	2	10	80		Rural
CRCOG	Yes	Granby	2022	10	1	1	18:47:00	4.8	7	69.2%	33	11	42	86		Suburban
WestCOG	No	Greenwich	2022	12	0	0	30:45:00	6.6	7	94.0%	123	20	4	147	55	Urban
RiverCOG	Yes	Haddam	2022	9	0	0	7:29:00	6.6	7	94.3%	12	0	29	41		Rural
NHCOG	Yes	Hartland	2022	8	0	0	8:56:00	6.1	7	87.5%	16	0	11	27		Rural
RiverCOG	Yes	Killingworth	2022	9	0	2	4:52:00	5.27	7	75.3%	25	0	1	26		Rural
SECOG	Yes	Lebanon	2022	11	1	2	18:04:00	7.29	9	81.0%	66	2	0	68		Rural
SECOG	Yes	Lisbon	2022	8	2	1	5:09:00	3.73	5	74.5%	14	0	3	17		Suburban
SCCOG	Yes	Madison	2022	13	6	0	32:20:00	4.5	7	64.3%	53	7	0	60		Suburban
SECOG	No	Montville	2022	12	5	1	14:13:00	5.5	7	79.0%	49	1	0	50		Suburban
WestCOG	No	New Canaan	2022	11	7	0	26:54:00	6.3	7	90.5%	64	5	0	69	31	Urban
WestCOG	No	New Fairfield	2022	12	0	0	9:53:00	5.5	7	78.6%	60	0	3	63	0	Suburban
NHCOG	No	New Hartford	2022	8	1	0	7:28:00	5.5	7	78.6%	20	3	3	26		Rural
WestCOG	Yes	New Milford	2022	9	0	2	21:13:00	6.4	7	90.9%	89	17	5	111	15	Suburban
WestCOG	Yes	Newtown	2022	18	0	4	23:07:00	5.1	7	73.4%	42	7	0	49	0	Suburban
SCCOG	No	North Haven	2022	7	0	0	7:18:00	6.3	7	89.8%	2	6	1	9		Urban
SECOG	No	N. Stonington	2022	7	0	1	5:25:00	5.4	7	76.8%	14	0	0	14		Rural
WestCOG	No	Norwalk	2022	18	0	0	28:58:00	5.6	7	80.2%	78	6	4	88	0	Urban
RiverCOG	Yes	Old Saybrook	2022	11	0	0	13:20:00	7	7	100.0%	24	6	3	33		Suburban
NVCOG	Yes	Oxford	2022	9	1	0	13:00:00	4.3	5	86.0%	13	0	50	63		Suburban
NVCOG	No	Prospect	2022	12	1	4	14:06:00	4.6	5	92.5%	33	0	14	47		Suburban
WestCOG	Yes	Redding	2022	15	8	0	18:01:00	5.8	7	82.5%	26	0	17	43	0	Suburban
WestCOG	No	Ridgefield	2022	20	8	0	39:56:00	5.5	7	78.6%	72	15	8	95	1	Suburban
NHCOG	Yes	Roxbury	2022	13	0	1	16:17:00	4.9	5	98.6%	66	1	13	80		Rural

Appendices

Appendix 2: Data Tables

COG Region	Buildable Square	Municipality	Date	No. of Regular Meetings Held	No. of Site Visits	Special Meetings	Elapsed Time	Average Attendance in 2022	Authorized Membership	% of Authorized members in 2022	Applications	Public Hearings	Enforcement Issues	Total Application Events	Agent Approved Projects in WestCOG	Urban Status
SECOG	No	Salem	2022	11	1	0	17:22:00	5.5	7	78.6%	20	0	8	28		Rural
WestCOG	No	Sherman	2022	12	0	1	13:18:00	6.2	7	89.0%	66	1	17	84	0	Rural
WestCOG	No	Stamford	2022	12	0	1	12:23:00	4.8	5	96.0%	57	0	2	59	0	Urban
Metro COG	No	Stratford	2022	10	0	1	15:31:00	6.5	7	93.5%	41	3	9	53		Urban
NECOG	Yes	Thompson	2022	11	1	0	21:31:00	3.73	5	74.5%	47	0	36	83		Rural
CRCOG	Yes	Tolland	2022	8	0	1	8:55:00	4.1	5	82.0%	8	2	0	10		Suburban
NECOG	Yes	Union	2022	1	0	0	1:02:00	7	7	100.0%	1	0	0	1		Rural
CRCOG	Yes	Vernon	2022	6	0	0	7:21:00	3.5	5	70.0%	3	8	3	14		Urban
NVCOG	No	Watertown	2022	11	0	0	11:55:00	5.8	7	83.1%	46	6	9	61		Suburban
WestCOG	No	Weston	2022	13	0	0	20:43:00	4.8	7	69.2%	25	3	0	28	0	Suburban
WestCOG	No	Westport	2022	11	4	0	33:34:00	5.0	7	71.4%	15	34	135	184	0	Urban
WestCOG	No	Wilton	2022	20	1	0	27:25:00	5.2	7	74.1%	73	33	31	137	45	Suburban
SCCOG	No	Woodbridge	2022	9	2	0	9:33:00	4.8	5	96.4%	22	5	7	34		Suburban
NVCOG	No	Woodbury	2022	20	10	0	42:43:00	4.7	5	94.8%	73	12	41	126		Suburban
NECOG	No	Woodstock	2022	10	0	0	20:09:00	4.0	5	80.0%	50	0	0	50		Rural
		Grand Total		683	96	41	1045:13:00	313.4	382.0	82.3%	2532	270	843	3573	157	
		Average		11.4	1.6	0.7	0.7	5.2	6.4	0.8	42.2	4.5	14.1	59.6		

Table 7: Building Permits Issued in Municipalities with/without Buildable Square that excludes Wetlands (2022)

Municipality	Did Not Adopt Buildable Square	Adopted Buildable Square	Total Building Permits
Bolton		3	3
Brookfield	8		8
Burlington		14	14
Canton	38		38
Chaplin		0	0
Colchester		16	16
Columbia		1	1
Cornwall		1	1
Deep River		4	4
East Haddam	23		23
Easton	7		7
Ellington		123	123
Essex		9	9
Farmington	35		35
Glastonbury	31		31
Goshen		16	16
Granby		20	20
Haddam		49	49
Hartland		3	3
Killingworth		8	8
Lebanon		4	4
Lisbon		12	12
Madison		9	9
Montville		17	17
New Canaan	58		58
New Fairfield	6		6
New Hartford	6		6
New Milford		60	60
Newtown		96	96
North Haven	13		13
North Stonington	11		11
Old Saybrook		11	11
Oxford		56	56
Prospect	7		7
Redding		5	5
Ridgefield		10	10
Roxbury		5	5
Salem	12		12
Sherman	8		8
Thompson		21	21
Tolland		19	19
Union		2	2
Watertown	14		14

Municipality	Did Not Adopt Buildable Square	Adopted Buildable Square	Total Building Permits
Weston	11		11
Wilton	10		10
Woodbridge	6		6
Woodbury	12		12
Woodstock	13		13
Average	16.5	21.2	19.2

Table 8: Workload Efficiencies of Inland Wetland Commissions in Western Connecticut (2022)

Municipality	Time Spent in Public Meetings in (hours)	Application and Violation Events before Inland Wetland Commission (excludes Agent Approved projects)	Commission Time per Project (hours)
Bethel	17.13	24	0.71
Bridgewater	4.75	32	0.15
Brookfield	39.47	151	0.26
Danbury	8.25	87	0.09
Darien	22.68	83	0.27
Greenwich	30.75	147	0.21
New Canaan	26.90	69	0.39
New Fairfield	9.88	63	0.16
New Milford	21.22	111	0.19
Newtown	23.12	49	0.47
Norwalk	28.97	88	0.33
Redding	18.02	43	0.42
Ridgefield	39.93	95	0.42
Sherman	13.30	84	0.16
Stamford	12.38	59	0.21
Weston	20.72	28	0.74
Westport	33.57	184	0.18
Wilton	27.42	137	0.20
Average	22.14	85	0.26

Note: An application event or violation event represents the total number of instances where an application or a violation came before the commission in 2022. Time spent in public meetings represents the total number of hours of public meetings in 2022 including all time devoted to applications, violations, approval of meeting minutes, public hearings, business, correspondence, training, and reports from the inland wetlands agent. Source: WestCOG staff analysis of the minutes of each Inland Wetland Commission for calendar year 2022, July 2023.

Table 9: Fee Schedule for Compliance Violations and Significant Impacts to Inland Wetlands in Western Connecticut (2023)

Municipality	Have Fees for Compliance Violations	Fee Formula for Identified Violations or Corrective Actions	Have Significant Activity Fees	Maximum Fee for Significant Wetlands Activity
Bethel	No		Yes	\$300
Bridgewater	No		No	
Brookfield	Yes	Twice Applicable Fee	No	
Danbury	No		No	
Darien	No		No	
Greenwich	No		No	
New Canaan	Yes	Triple Applicable Fee	No	
New Fairfield	No		No	
New Milford	Yes	Twice Applicable Fee or \$75/hr. whichever greater	Yes	\$2,000
Newtown	Yes	Five times Applicable Fee	No	
Norwalk	Yes	Twice Applicable Fee	Yes	\$1,360
Redding	No		No	
Ridgefield	Yes	\$75 for violation inspections; \$100/trip for corrective action inspections	No	
Sherman	Yes	\$200 for compliance inspections	Yes	\$500
Stamford	No		No	
Weston	No		Yes	\$1,300
Westport	Yes	Twice Applicable Fee	No	
Wilton	Yes	Corrective Action Fees vary for Minor (\$360), Intermediate (\$960) and Significant (\$2,460) Regulated Activities	Yes	\$1,260
Total Yes	9		6	

Appendix 3: Suggested Readings: Wetlands and Land Development

Lot Size Standards for Public Health

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