

Connecticut Department of Energy & Environmental Protection Bureau of Water Protection & Land Reuse Water Planning & Management Division

Instructions for Completing a Permit Application for Diversion of Water for Consumptive Use

Use these instructions to: 1) complete the permit application form <u>DEEP-WPMD-APP-100</u>, 2) prepare supporting documents, and 3) publish the applicant's notice of permit application. These instructions are not a substitute for the requirements of the relevant statutes and any regulations thereunder. You should review all applicable laws prior to completing this application. Remember, it is your responsibility to comply with all applicable laws.

Introduction

The Water Planning and Management Division (WPMD) of the Department of Energy and Environmental Protection (DEEP) administers the consumptive water diversion program. For any questions you may have regarding application requirements, contact WPMD at 860-424-3020.

Who Needs a Permit?

Any person proposing to conduct activities which cause, allow or result in the withdrawal from waters of the state must obtain a consumptive water diversion permit unless the activity is registered (grand fathered) or is exempted from water diversion permit requirements under CGS section 22a-377 or section 22a-377(b)-1 of the Regulations of Connecticut State Agencies (RCSA). A consumptive water diversion permit is generally required to: 1) withdraw groundwater in excess of fifty thousand (50,000) gallons of water during any twenty-four hour period; 2) withdraw surface water (including skimming of flood flows) in excess of fifty thousand (50,000) gallons during any twenty four hour period; and 3) transfer water from one water supply distribution system to another where the combined maximum withdrawal from any source supplying the system or interconnected

systems exceeds fifty thousand (50,000) gallons during any twenty-four hour period; or alter or modify a registered diversion.

Please be aware that your proposed activities may require additional permits from regulatory agencies other than DEEP, i.e., municipal wetlands agencies and the U.S. Army Corps of Engineers (1-800-343-4789). Such agencies should be contacted directly.

Any person proposing to transfer a DEEP permit must submit a completed <u>License Transfer Form</u> (DEEP-APP-006) and transfer fee to DEEP. The *License Transfer Form* may be used for changes in owners and operators of the licensed activity. If other changes are proposed to the facility, the site, and/or to facility operations, the proposed transferee may also be required to submit a request for permit modification. For further information concerning license transfers, please contact the Office of Planning and Program Development (OPPD) at 860-424-3003.

Notice of Permit Application

Section 22a-6g of the Connecticut General Statutes imposes public notification requirements on applicants for certain permits issued by DEEP.

In order to comply with these requirements, you

must:

1. Publish notice of the permit application in a newspaper of general circulation in the area potentially affected by the activity that is the subject of your permit application. This notice *must follow the format* specified at the end of these notice instructions and must be published *before* you submit your application to the DEEP. The format contains instructions in brackets. You must insert the appropriate information to replace the instructions in the brackets. Be sure to *delete* all instructions that are specified in brackets, in bold and in uppercase type. When a choice is specified in brackets, do not include any of the words in brackets unless they specifically apply to the activity you intend to conduct. For newspapers of general circulation for specific towns in Connecticut see

www.ct.gov/deep/lib/deep/permits_and_lice
nses/newspapers.pdf

- 2. Send a copy of the published notice, to the chief elected official of the municipality in which the regulated activity is proposed. The chief elected official is generally the mayor, 1st selectman, town manager or the chairman or president of the town council, depending on the form of government of the municipality. Specific information for each municipality is listed in The State Register and Manual (often referred to as the Blue Book), which is available on the Secretary of the State's website (portal.ct.gov/SOTS), and is also usually available at town clerk's offices, the State Library and public libraries. The Secretary of the State's website also has a list of mayors and first selectmen available (portal.ct.gov/-/media/SOTS/ElectionServices/lists/Mayors FirstSelectmanList-1-7-19.pdf?la=en) If you have questions, you can call the Secretary of
 - the State's office at 860-509-6190 or the town clerk of the appropriate municipality.

 Include a copy of the published notice of permit application and a completed <u>Certification of Notice Form - Notice of</u> <u>Application</u> (DEEP-APP-005A) as Attachment AA to the permit application.

The copy of the published notice of permit application must be a photocopy of the page of the newspaper where the notice was published that displays the notice, the name of the newspaper and the date of publication.

The <u>Certification of Notice Form - Notice of</u> <u>Application</u> asks you to:

- a) specify the date and newspaper in which the notice was published;
- b) certify that a copy of the notice was provided to the chief elected municipal official; and
- c) identify the municipal official(s) to whom the notice was provided.

If you have any questions about these notice requirements contact WPMD at 860-424-3020.

Your application will not be processed until DEEP receives the copy of the notice as described above and a completed Certification of Notice Form - Notice of Application.

In addition, DEEP may notify you that other forms of notice are required, including the posting of a sign in accordance with CGS section 22a-6*l*.

Also, when the application review is complete and DEEP has made a final decision on your permit application, DEEP will publish a Notice of Tentative Determination in the newspaper. Please note that you will receive an invoice for the public notice fee and you will be responsible for payment.

The following format must be used when publishing notice of an application:

Notice of Permit Application

Town(s): [LIST ALL TOWNS IN WHICH THE REGULATED ACTIVITY IS LOCATED OR WILL HAVE AN AFFECT]

Notice is hereby given that **[INSERT NAME OF APPLICANT]** (the "applicant") of **[INSERT ADDRESS OF APPLICANT HERE**] will submit to the Department of Energy and Environmental Protection an application under Connecticut General Statutes Section 22a-369 WATER DIVERSION for a permit to divert waters of the state.

Specifically, the applicant proposes to **[INSERT A BRIEF DESCRIPTION OF THE PROPOSED** ACTIVITY AND ITS PURPOSE]. The proposed activity will take place **[INSERT THE STREET** ADDRESS; IF THE ADDRESS DOES NOT HAVE A STREET NUMBER, GIVE THE SPECIFIC LOCATION OF THE PROPOSED ACTIVITY WITH REFERENCE TO A FIXED LANDMARK E.G., A ROADWAY INTERSECTION, BRIDGE OR OTHER STRUCTURE]. The proposed activity will potentially affect: **[INSERT ANY NATURAL RESOURCES POTENTIALLY AFFECTED BY** SUCH ACTIVITY (E.G., WETLANDS, WATERCOURSES BY NAME, GROUND WATERS)].

Interested persons may obtain copies of the application from [INSERT THE NAME, MAILING ADDRESS AND TELEPHONE NUMBER OF THE APPLICANT'S REPRESENTATIVE].

The application will be available for inspection at the Department of Energy and Environmental Protection, Water Planning and Management Division, 79 Elm Street, Hartford, CT 06106-5127, telephone 860-424-3020, from 8:30am to 4:30pm Monday through Friday. Please call in advance to schedule review of the application.

How to Apply

Your permit application must include all of the following items:

- <u>Permit Application for Diversion of Water</u> <u>for Consumptive Use</u> (DEEP-WPMD-APP-100)
- <u>Attachment C: Documentation Form for</u> <u>Consumptive Water Diversion Permits</u> (DEEP-WPMD-APP-101)
- Additional Supporting Documents
- The required initial fee (check or money order payable to "Department of Energy and Environmental Protection")
- A copy of the published notice of permit application, as described in these instructions with a completed Certification of Notice form (DEEP-APP-005A).

You must submit the above materials together as a complete package to:

CENTRAL PERMIT PROCESSING UNIT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

When submitting your permit application, label your supporting documents as directed on your application form and always include, on each document, the applicant's name as indicated on the main application form. Be sure to list these supporting documents in your table of contents in the Executive Summary. If additional pages are attached to the form concerning an application response, they should be numbered and titled to correspond to the specific number and title of the request for information on the application form and include the name of the applicant as indicated on the main application form.

You should retain a copy of all documents for your files.

Permit Application Instructions

Please read the application form and instructions carefully. They have been designed to obtain specific information and anything that is missing or unclear will cause delays in the review process. If you believe that the information requested does not apply to your specific project, explain in the space provided, why you believe that is the case. Do not respond with "NA" ("not available" or "not applicable"); an "NA" response will deem your application insufficient and may cause your application to be returned. If a question or supporting document is only required for specific activities it will be noted on the application form and in the instructions.

Please be advised that these instructions are not a substitute for any state or federal statutes or regulations. Be sure to refer to the applicable statutes and regulations while completing your application.

Refer to the Available Resources Section at the end of these instructions to obtain all required documents and guidance related to the subject permit application.

Part I: Application Type

Please indicate whether you are applying for a new permit, or for a renewal of an existing permit, or for a modification of an existing permit, by checking the appropriate box. A permit is deemed to be "existing" only if it has not yet expired on the date you file your application. Please provide the existing permit number and expiration date for renewals and modifications.

Part II: Permit Type and Fee Information

Check the applicable box for each permit requested in the submission, total the application fees and enclose a check for the required amount. If the applicant is a municipality, the 50% fee discount applies. DEEP will not process an application unless the required fees have been paid. The payment should be in the form of a check or money order made payable to "Department of Energy and Environmental Protection"

Note: The flows listed in this part of the permit application in million gallons/day (mgd) refer to the maximum quantity of water proposed to be withdrawn in any twenty-four hour period.

Public Notice Information

The public notice of application must be published **prior** to submitting an application, as required in CGS section 22a-6g. A copy of the published notice of application, as described in these instructions, and the completed Certification of Notice Form must be included as Attachment AA to this application. Your application will **not** be processed if Attachment AA is not included. Indicate the public notice date of publication.

Part III: Applicant Information

If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the <u>Request to Change</u> <u>Company/Individual Information</u> to the address indicated on the form. If there is a change in name of the entity holding a DEEP license or a change in ownership, contact the Office of Planning and Program Development (OPPD) at 860-424-3003. For any other changes you must contact the specific program from which you hold a current DEEP license.

When completing this part, please use the following standards:

• *Name* - Provide the full, legal *company/firm* name. (If identifying an entity registered with the Secretary of the State, fill in the name exactly as it is shown on the registration. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at <u>CONCORD</u>. If identifying an *individual*, provide the legal name (include suffix) in

the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.). If the applicant is a governmental body, identify the city or town of such body followed by the relevant department, board or division.

- *Phone* Unless otherwise indicated, the phone number provided should be the number where the corresponding individual can be contacted during daytime business hours.
- *Contact Person* Provide the name of the specific individual within the company whom DEEP may contact.
- *E-Mail* Applicants must provide an accurate e-mail address when completing their application form. The e-mail address may be used for future correspondence from DEEP to your business.
- 1. *Applicant* Complete the information concerning the applicant.
- 2. *Billing Contact* Complete the information concerning the applicant's billing contact, if different than the applicant.
- 3. Primary Contact If you have authorized a consultant, engineer, attorney or other individual to act for you during the processing of the permit application, complete this section. DEEP will direct copies of all correspondence and inquiries to this primary contact. Please be aware that for legal reasons there will be circumstances when DEEP will notify the applicant instead of the primary contact.
- 4. *Attorney* It is not required that an applicant be represented by an *attorney* or any other agent. If you do have an attorney, complete this section.
- 5. *Property Owner* If the applicant is not the owner of the affected property, complete this section.

6. *Engineers or Consultants* - List engineers or consultants employed or retained to assist in preparing the application or to design or construct the proposed activity.

Part IV: Pre-Application Meeting

If a pre-application meeting was held for the subject activity, provide the DEEP contact staff name and the meeting date.

Part V: Site Information

- 1a. Site Name and Location The site or project name or number identified should be the name by which the site or project is commonly known and/or may be uniquely identified. If the site or project has not been given a name, describe the proposed activity (e.g., proposed dam or proposed subdivision, etc.). The information given as the location address should be the address of the property at which the proposed activity will take place. Include the street address and the municipality. If the property does not have a street number, describe the location in terms of the distance and direction from an obvious landmark such as an intersection with another roadway, a bridge, or a river. For example, "... on the east side of River Street, approximately 1000 feet north of its intersection with Bear Swamp Road."
- b. *Tax Assessor's Reference* Provide the Tax Assessor's Map, Block and Lot Number of the site. These numbers may be found on the most recent tax bill for the property or obtained from the tax assessor's office in the town in which the property is located.
- c. Provide the latitude and longitude, in degrees, minutes and seconds, of the approximate center of the facility or site of the proposed work. In addition, please indicate the method used to determine the latitude and longitude coordinates. There are a variety of methods of deriving latitude and longitude coordinates with the Global Positioning System (GPS) being the most

accurate.

d. Indicate the drainage basin number(s) for the basin(s) wherein the proposed activity will take place. Drainage basin numbers are delineated on a map compiled by the Connecticut Geological Natural History Survey and entitled "Natural Drainage Basins of Connecticut, 1981", as amended. See "Available Resources" section at the end of these instructions for assistance in obtaining this map.

DEEP requires all applicants to conduct a review of the following Coastal, Natural Diversity Data Base and Aquifer Protection information as soon as possible and to resolve any outstanding issues, where feasible, before submitting their permit application to DEEP to ensure a more timely and efficient review of their permit application.

2. Coastal Management Act Consistency

If the application is for a new permit or a modification of an existing permit where the physical footprint of the subject activity is modified you must further evaluate your activity as detailed below.

Activities within the state's coastal area must be consistent with the Connecticut Coastal Management Act (CGS sections 22a-90 through 22a-112). You may be required to complete a Coastal Consistency Review Form (DEEP-APP-004) to demonstrate that the activity is consistent with the standards and policies of the Connecticut Coastal Management Act. To determine whether this requirement pertains to you, you must first decide if your activity is, or is proposed to be, located in either the coastal area or the coastal boundary.

The coastal area, as defined in CGS section 22a-94 (a), includes the land and water within the following towns:

| Branford | Guilford | Old Saybrook |
|------------|----------|--------------|
| Bridgeport | Hamden | Orange |
| Chester | Ledyard | Preston |
| Clinton | Lyme | Shelton |

Darien Madison Milford Deep River East Haven Montville New London East Lyme Essex New Haven Fairfield North Haven Greenwich Norwalk Groton (City and Norwich Town of) Old Lyme

Stamford Stonington (Borough and Town of) Stratford Waterford West Haven Westbrook Westport

The coastal boundary, as defined in CGS section 22a-94(b), is a designated region within the coastal area. It is delineated on DEEP-approved coastal boundary maps which are available for review at the DEEP Land and Water Resources Division (LWRD), the DEEP File Room, and municipal offices of towns located in the coastal area. Copies of these maps may also be purchased from the **DEEP Store**. The map can also be viewed at: www.cteco.uconn.edu/map catalog.asp (Select the town and then select coastal boundary. If the town is not within the coastal boundary you will not be able to select the coastal boundary map.)

Activities within the coastal boundary:

If your activity is, or is proposed to be, located in the coastal boundary, and you are applying for a new permit or a modification of an existing permit where the physical footprint of the subject activity changes, you must complete a <u>Coastal Consistency</u> <u>Review Form</u> (DEEP-APP-004) and submit it with your application as Attachment K.

For renewals or other modifications of existing permits for activities located within the coastal boundary, you are not required to submit a Coastal Consistency Review Form with your initial application materials. However, DEEP may notify you that submission of this form is required to process your application depending upon the specific activities to be conducted and their potential impact on coastal resources.

Activities outside the coastal boundary but within the coastal area:

For permit applications (new permits,

modifications, or renewals) for activities located outside of the coastal boundary, but within a town in the coastal area, you are not required to submit a Coastal Consistency Review Form with your initial application materials. However, DEEP may notify you that submission of this form is required to process your application depending upon the specific activities to be conducted and their potential impact on coastal resources.

For assistance in completing the form, or if you have questions on this process, call LWRD at 860-424-3034.

3. Natural Diversity Data Base-Endangered and Threatened Species

Section 26-310 (a) of the Connecticut General Statutes states that each state agency, in consultation with the DEEP commissioner, shall conserve endangered and threatened species and their essential habitats, and shall ensure that any activity authorized, funded or performed by such agency does not threaten the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat designated as essential to such species.

Please refer to "Requests for Natural **Diversity Data Base State Listed Species** Reviews" located on the DEEP website at: www.ct.gov/deep/nddbrequest to determine if your activity, including any areas beyond the immediate footprint of the project and beyond the property line that will be either directly or indirectly affected, is located within an area identified as, or otherwise known to be, a habitat for endangered, threatened or special concern species. Include areas such as equipment and materials staging areas, areas receiving discharge and dredge material disposal areas. If applicable, prior to submitting the subject application, you must submit a Request for NDDB State Listed Species Review" form (DEEP-APP-007) to NDDB. Please note that NDDB review generally

takes 4 to 6 weeks and may require the applicant to produce additional documentation, such as ecological surveys, which must be completed prior to submitting the subject permit application. A copy of the NDDB Determination response letter that has not expired *must* be submitted with the completed subject application with your application as Attachment F (Environmental Report) or in Attachment N if no environmental report is required. Include a copy of any mitigation measures developed for this activity and approved by NDDB. Do not submit any NDDB Preliminary Site Assessments with your application. Be aware that you must renew your NDDB Determination if it expires before project work commences.

4. Aquifer Protection Areas

Aquifer Protection Areas are defined in CGS section 22a-354a through 22a-354bb and are the areas that contribute water to public water supply wells. Many towns within the state are required to establish Aquifer Protection Areas. Level A areas are final, regulated areas under the aquifer protection program. Level B areas are preliminary approximations of aquifer protection areas that have not yet been mapped to final standards, so the shape of the area may change when final mapping is completed. Level B maps provide an approximation of the Aquifer Protection Areas.

Review the <u>Aquifer Protection Area</u> maps to determine if your site is located in a Level A or Level B mapped aquifer protection area and check the appropriate box.

If your site is within a Level A aquifer protection area and your business is registered with either the local aquifer protection agency or DEEP, then no action is required.

If your site is within a Level A aquifer protection area and your business is not already registered, check the <u>Table of</u> <u>Regulated Land Uses</u> to determine if your activity is required to be registered under the Aquifer Protection Area Program. If you determine your activity is required to be registered, then contact the <u>local aquifer</u> <u>protection agent</u> or DEEP to take appropriate actions.

If your site is within a Level B aquifer protection area, then no action is required at this time. However, you may be required to register under the Aquifer Protection Area Program in the future when the area is delineated as Level A.

For more information on the Aquifer Protection Area Program visit the DEEP website at <u>www.ct.gov/deep/aquiferprotection</u> or contact the program at 860-424-3019.

5. Conservation or Preservation Restriction

If the subject site has a conservation or preservation restriction, proof of written notice of this application to the holder of such restriction or a letter from the holder of such restriction verifying that this application is in compliance with the terms of the restriction, must be submitted as Attachment L. The municipality where the site is located may have information concerning such restrictions.

- Fisheries Consultation If the diversion of water for consumptive use involves one of the following activities, submit a completed <u>Fisheries Consultation Form</u> (DEEP-FISH-APP-007), as Attachment M.
 - Withdrawal of water from a nontidal/inland river, stream, pond or lake
 - Withdrawal of water from a wetland, marsh, swamp, or bog hydrologically connected to a non-tidal/inland river, stream, pond or lake
 - Withdrawal of groundwater from stratified drift deposits hydrologically connected to a non-tidal/inland river, stream, pond or lake

7. *Other Permits* - List all local, state and federal permits or certificates that have already been issued for the site or the proposed activity. Include municipal permits for subdivision of land and any zoning approvals.

Part VI: Supporting Documents

All permit applications must include Attachments AA through J, and Attachments K through N only if required. Check the appropriate box by each attachment being submitted as verification that all required attachments have been submitted. Please label all attachments as referenced in the permit application form and in these instructions, being sure to include the name of the applicant as indicated on the application form.

Consult DEEP staff - Regulated activities vary widely in their effect on the environment. The type and nature of the technical documentation required for a sufficient application will vary depending on the nature of the environmental effects and the relative significance of the impacts of the proposed activity. For this reason, DEEP strongly recommends that applicants consult with WPMD staff prior to conducting environmental and engineering studies. Depending on the nature of a proposed activity, DEEP may require information that is not specifically described in these instructions or may require clarification or additional explanation of information that is submitted. In most cases, applicants will require the assistance of a professional engineer, soil scientist, hydrogeologist, or biologist to adequately prepare supporting documentation.

Professional Certification and Seals as required per CGS section 20-306a - All surveys, plans and reports prepared for the purpose of documenting property or ownership boundaries of land must be prepared by a Connecticutregistered land surveyor and must bear his or her certification and seal. For projects where public welfare or the safeguarding of life, health or property is involved or where design criteria need to be incorporated, surveys, plans and reports must be prepared by an engineer, land surveyor or architect registered in Connecticut and bear his or her certification and seal.

WPMD has examples of technical reports and analyses from its permit files available for inspection.

Part VII: Application Certification

After the application has been completed it must be reviewed and signed by both the applicant and the individual(s) who actually prepared the application and any part thereof required by the application. This includes: consultants, professional engineers, surveyors, soil scientists, etc. By their signature, they certify that to the best of their knowledge and belief, the information contained in the application, including all attachments, is true, accurate and complete.

The certification of the application package must be signed as follows:

- For an individual(s) or sole proprietorship: by the individual(s) or proprietor, respectively;
- 2. For a corporation: by a principal executive officer of at least the level of vice president;
- 3. For a limited liability company (LLC): a manager, if management of the LLC is vested in a manager(s) in accordance with the company's "Articles of Organization", or a member of the LLC if no authority is vested in a manager(s);
- 4. For a partnership: by a general partner;
- 5. For a municipal, state, or federal agency or department: by either a principal executive officer, a ranking elected official, or by other representatives of such applicant authorized by law.

An application will be considered insufficient unless all required signatures are provided.

Instructions for Attachments

Attachment AA: Notice of Permit Application

Submit as Attachment AA, a copy of the published notice of permit application, and a completed <u>Certification of Notice Form - Notice</u> <u>of Application</u> (DEEP-APP-005A).

The copy of the published notice of permit application must be a photocopy of the page of the newspaper where the notice was published, that displays the notice, the name of the newspaper and the date of publication.

Attachment A: Executive Summary

Submit as Attachment A, an executive summary which includes:

- 1. a brief description of the proposed activity;
- 2. a synopsis of the documentation included in the application including the environmental and engineering analyses conducted and the results of such analyses;
- in the case of a permit renewal application, a description of any change, if any, in proposed regulated activities;
- 4. the anticipated time frame for initiation and completion of the proposed activities; and
- 5. any other information the applicant deems relevant to an understanding of the proposed activity.

Attachment B: United States Geological Survey (USGS) Topographic Map

Submit as Attachment B, an 8-1/2" x 11" copy or original of a USGS topographic map, at a scale of 1:24,000 indicating the exact location of the project site and the proposed activities. DEEP will use this map to enter your project location into its Geographic Information System (GIS). It is important that you accurately locate the project site and proposed activities, because the GIS generates natural resource information relevant to your site. An inaccurate description of the project location will delay processing of your application.

The location of the project site and regulated activities should be indicated on the map as follows: outline the parcel(s) of land upon which the proposed project will be located and pinpoint or circle the precise areas where activities are proposed. Where there are multiple areas of proposed activities, each area should be pinpointed or circled and numbered for reference purposes. If the size of the parcel is so small that outlining its boundaries and pinpointing regulated activities on the map is impractical, simply pinpoint the approximate center of the parcel. In the case of a well or well field, the location of the proposed wells, in addition to any existing wells, should be identified. See Figure A, at the end of these instructions for examples of how a USGS map must be labeled when submitted.

Attachment C: <u>Documentation Form for</u> <u>Consumptive Water Diversion Permits</u> (DEEP-WPMD-APP-101)

- 1. *Name of Applicant* Fill in the name exactly as it appears on the main application form.
- 2. Name of waters affected by diversion

Indicate the name of the wetlands, watercourses and aquifer, as applicable, involved with or potentially affected by the proposed project. Many wetlands and most watercourses are named on USGS topographic maps. Please use the "official" names for wetlands and watercourses as given on the USGS maps. If the wetland, watercourse or aquifer is known locally by some other name, provide that name as well. For example, if Round Lake is used on the USGS map for a waterbody ("also known as") a.k.a. Smith's Pond. write the name as follows: Round Lake a.k.a. Smith's Pond. In cases where the wetland or watercourse is not named on the USGS map, indicate the name of the watercourse immediately downstream and indicate that the wetland or

watercourse involved in the application is a tributary to that watercourse. For example, in the case of wetlands: "unnamed wetlands tributary to Smith's Pond;" and in the case of an unnamed watercourse: "unnamed tributary to Smith's Pond". In the case of an unnamed aquifer, simply write "groundwater".

3. Location of discharge

If water will be discharged to a watercourse, sewage treatment plant or groundwater, in connection with the proposed diversion, indicate the official name of the watercourse or sewage treatment plant or indicate the location of groundwater. Official names of watercourses are found on the USGS topographic maps. If there is another name by which the watercourse is known, list that name also as a.k.a. ("also known as").

4. Drainage Basins

- a. Indicate the drainage basin number(s) for the basin(s) wherein the proposed diversion will take place. Drainage basin numbers are delineated on a map compiled by the Connecticut Geological Natural History Survey and entitled "Natural Drainage Basins of Connecticut, 1981", as amended. See "Available Resources" section at the end of these instructions for assistance in obtaining this map.
- b. *Interbasin Transfer of Water* Indicate by checking "Yes" or "No" whether the proposed diversion of water involves the transfer of water from one subregional drainage basin to another. If yes, indicate the donor basin number and the basin number(s) where the water will be used or discharged. Also, if yes, an environmental impact report (EIR) in accordance with CGS section 22a-369(10) **may** be required. Please call WPMD at 860-424-3020 to verify whether this requirement applies. If so, submit such an environmental report

with this application as Attachment C4. The EIR should focus on and document the effect of the transfer on present and future water uses in the donor basin, taking in account the effects of the other diversions which the applicant reasonably expects to commence or maintain in the future. The EIR should include a plan for meeting water supply needs and demands in the donor basin for at least twenty-five years. The EIR must also evaluate alternative solutions to water supply or wastewater conflicts identified therein and should include: (1) a comparative cost analysis of alternative measures to resolve such conflict(s) and (2) a description of the environmental effects of each such alternative.

The EIR should include an evaluation of the alternatives to the proposed diversion, including water conservation measures, the financial costs and environmental impacts of each such alternative considered by the applicant, and a detailed explanation of why each such alternative was rejected by the applicant.

In addition to the above information, the EIR should identify existing water uses, existing and potential conflicts in water use, and existing and projected water supply needs and demands in the affected donor basins(s), and should evaluate the social and economic effects of the proposed diversion on the affected donor basin(s), including the capacity of remaining water resources to support existing and projected growth and development for at least 25 years. This evaluation should address the effects of the proposed diversion on water supply needs and demands, wastewater treatment, waste assimilation, power generation, flood management, navigation, water quality, recreation, wetlands habitat, agriculture, fish and

wildlife, and maintenance of adequate flows for the above referenced needs and resources.

The scope of the EIR is determined by the limits of the "donor basin," or the contributing "drainage basin," involved in the interbasin transfer of water. DEEP's regulations define these terms to mean "... that area [of the donor basin] which will or is reasonably likely to be affected by the proposed diversion."

- 5. *Description of Site* Describe all natural and manmade features of the property at which the regulated activity is proposed, including, at a minimum, wetlands, watercourses, floodplains, and existing development. Also describe any development planned by others that is related to the applicant's proposed activities.
- 6. *Description of Diversion* Describe the proposed diversion including its location, purpose and its general method of operation. Include all design elements pertinent to the diversion which are related to diverting, withdrawing, distributing and discharging water and which are intended to mitigate any unavoidable adverse impacts. Reference specific plans, drawings, and portions of reports in your application which fully described the elements of the regulated activity.
- 7. Withdrawal and Use of Water
 - a. Provide the information outlined on the application form.
 - mg = million gallons mgd = million gallons per day cfs = cubic feet per second gpm = gallons per minute
 - b. Describe how often the diversion will be used in terms of specific days and/or weeks of specific months of the year. If the diversion is seasonal or is otherwise restricted to certain times of the year, or is for back-up or emergency use,

describe the frequency of such diversion and the conditions for such use.

- c. If the application is to renew or modify a permit, any proposed changes in the diversion such as an increase in the rate, quantity or frequency of diversion, change in location or design of withdrawal structures, or change in supply sources, are considered *new diversions* and may not be initiated until the required renewal or modification of the permit is obtained.
- d. Describe how withdrawals and use of water will be metered, measured, or controlled, including details on the equipment to be utilized, the specific flow measurements to be taken and the criteria to be utilized for such measurements if a meter is not used.
- 8. *Need for Diversion* Describe the basic objective(s) of the proposed diversion and any public benefits to be derived therefrom. Include in Attachment H (Alternatives Assessment) any information supporting why the diversion is needed.
- 9. *Instream Flow Maintenance* If the proposed diversion may interrupt or significantly diminish stream flows, describe any proposed design and operational measures to provide an instantaneous flow or release of water in the natural watercourse downstream of the diversion.
- 10. Long-range Water Conservation Plan

A long range plan for conserving water and for limiting water use during seasonal or unexpected water shortages must be submitted as Attachment C10. This "long range water conservation plan" (LRWCP) should:

 a. fully describe the policies and goals of the applicant's long-range water conservation efforts; the actions taken or to be taken in furtherance of such polices and goals; an implementation schedule for such actions; and a detailed program for measuring, in terms of quantities of water saved or to be saved, the effectiveness of the water conservation efforts;

- b. fully describe the volume of lost or unaccounted for water, based on the average of available data from the five years immediately preceding submission of the application or, if such data are unavailable, on the most current of existing data; and
- c. fully describe the applicant's leak detection and repair program and, in the case of an application to divert water for public water supply, leak detection services offered to consumers.

DEEP may, after initial review of the application, require an applicant to submit a plan to reduce lost or unaccounted for water to an acceptable level. If required, such plan shall include, in addition to any other information requested, a schedule to implement such remedial actions and a detailed program for measuring the effectiveness of such actions.

11. Holders of Flowage Easements/Rights

List the names and addresses of the known current holder of flowage easements or other flowage rights known to the applicant, potentially affected by the proposed regulated activity. DEEP will notify such holder of DEEP's tentative determination to grant or deny a permit application. It is the applicant's responsibility to review municipal land records and provide correct mailing addresses for all such holders. Failure to provide correct mailing addresses may delay processing of the application.

12. *Hydrogeologic Report* - If your proposed regulated activity includes pumping water from wells or a surface waterbody within stratified drift, a hydrogeologic report must

be submitted as Attachment C12. The hydrogeologic report should include hydrogeologic investigations of the effects on ground water and surface water due to pumping water from wells and waterbodies. In the case of a diversion permit application to construct and operate one or more wells, this report provides the foundation for an assessment of impacts in the Environmental Report (Attachment F). The investigations and analyses must completely describe the effects of the withdrawal on ground water and surface water including public and private water supply wells, ground water quality, stream flows, and wetlands. (Where ground water contamination is present, contaminant transport modeling may be required.) The hydrogeologic investigation should be supported by a ground water model which delineates the area of influence of the maximum proposed withdrawal under seasonal low flow and drought conditions. Piezometric surface contours within the area of influence are required for an analysis of the effects of drawdown on water resources within the area of influence of the well(s).

The methodology established in DEEP's Level A Mapping Regulations (RCSA section 22a-354b-1) for numerical ground water modeling provides the most accurate delineation of an area of influence for a well screened in stratified drift. With respect to wells to be drilled in bedrock, DEEP recognizes that modeling may not be very useful or practical, therefore a plan for pump testing and monitoring ground and surface water in the vicinity of the well(s) should be proposed in lieu of modeling. The hydrogeologic report should develop a conceptual model of the aquifer in which a proposed well is to be located and should justify the selection of the ground water model used. The identification of both ground water flow boundaries and resources present in the area is a key consideration in the choice of an appropriate ground water model. The location of these boundaries and resources should be used to determine the

selection of monitoring locations for data collection and/or aquifer testing. (See data collection section of the Level A Mapping Regulations.)

The ground water model should be fully documented. Documentation should include, but not be limited to, input data and aquifer parameters (including analyses used to derive the parameters), the model grid and its dimensions, demonstrations of model calibration and verification, initial conditions, sensitivity analyses and predictive runs.

An average water table condition obtained from the calibrated, verified model should be used as the starting point for the predictive simulation.

In lieu of an aquifer test to determine induced infiltration from a nearby stream or other surface water, impacts to stream flow may be analyzed by subtracting 100% of the proposed maximum withdrawal from the 99% durational flow in the stream. Durational flows for ungaged streams may be obtained through the USGS StreamStats web-based tool

(https://streamstats.usgs.gov/ss/).

A rating curve for an ungaged stream should be constructed to document pre-diversion conditions and to link durational flows with flows observed during data collection. In general, data collected at lower flows will be of particular interest for documenting environmental impacts (see instructions for Attachment F, Environmental Report).

Where necessary, stream gaging should be performed using the methodology given in RCSA section 22a-354b-1(d)(3) (Level A Mapping regulations). A recommended technical reference for methodology of stream flow measurement is Measurement and Computation of Stream Flow (Volumes 1 & 2), U.S. Geological Survey Water-Supply Paper 2175, Rantz, S.E. et al, 1982. Summary of documents submitted with Attachment C - Check the applicable box by each document being submitted under Attachment C as verification that all applicable documents have been submitted.

Note: Pre-application meetings between the applicant's consultant and DEEP staff to discuss technical issues in the planning stages of application preparation are strongly recommended.

Attachment D: Plan Sheets and Drawings

Submit as Attachment D, plans and drawings showing existing and proposed conditions at the subject property and any other regulated areas. All such plans and drawings should be clearly labeled and be sufficiently detailed to fully describe what is being proposed, where, and by whom. Note: detailed final structural design plans are required for dams, dikes, flood control structures, retaining walls, and structurally flood proofed structures. Clear, well-drawn plans are an important tool to help DEEP staff understand the potential effects of the proposed activity and to assess the adequacy of its design.

Plans and drawings should be of an appropriate scale and show the following:

- 1. all plan sheets and drawings should contain a map key and a title block showing at least its title, number, original date and revision dates, the name of the applicant, the name of the individual and the firm that prepared the plan, plan scale and bear all appropriate professional certifications and seals. The first sheet of a set of plans or drawings should contain a location key (e.g., USGS topographic map).
- 2. the boundaries of the subject property, the location of properties abutting the subject property, and the names of the owners of record of such abutting properties;
- 3. existing and proposed topography and

all proposed excavation, filling, and structures (Contour intervals should be no greater than two (2) feet; cross sections may also be useful to clarify grade changes);

- 4. the location at the subject property of the top of the affected watercourse or river bank and the location of the existing and proposed ordinary high water line (for tidal waters, the local high tide line);
- 5. a North arrow, the direction of water flow, and the topographic datum;
- 6. the location of the floodplain and floodway and the elevation contour of the base flood based on information provided by the National Flood Insurance Program (NFIP); NFIP information may be obtained through the municipal engineering or the Town Clerk's offices;
- 7. the location of wetlands, watercourses and other waterbodies potentially affected by the proposed activity and the description of the type of any wetlands and wetland soils at the subject property and reference to the soil scientist's or biologist's report (title, author and date) wherein the delineation of such wetlands is described;

Wetlands and watercourses should be delineated in accordance with CGS section 22a-38 (Inland Wetlands and Watercourses Act), except in the case of an application for water quality certification under Section 401 of the Federal Clean Water Act. In such case, wetland delineations should be accomplished using the current federal delineation method - *Corps of Engineers Wetlands Delineation Manual*, Environmental Laboratory, Department of the Army Waterway Experiment Station, Vicksburg, Mississippi, 1987. Technical Report Y-87-1;

8. in the case of a permit application involving any regrading, excavation, filling, dewatering or other land or water disturbance activity that could result in the detachment of soil or rock fragments by water, wind or ice, an erosion and sediment control plan prepared in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, DEEP Bulletin 34 (the "Guidelines"). See requirements described under Attachment H: *Soil Erosion and Sediment Control Plan;*

9. details of any proposed measures (best management practices) for minimizing adverse impacts during construction.

Attachment E: Soil Scientist Report

If wetlands or watercourses will be altered or otherwise affected, directly or indirectly, by the proposed activities, the wetlands must be delineated and their boundaries shown on application plans (Attachment D) and the applications must include a soil scientist report as Attachment J. The report must describe, in detail, the soils on the subject property and be consistent with the standards set by the National Cooperative Soil Survey of the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) formerly known as the Soil Conservation Service. This report must include a map showing the soils on the subject property, a summary of the investigation performed, and the results of such investigation. The primary focus of the soils report is to identify soil-based constraints on development and to delineate the limits of wetlands and watercourses consistent with CGS subsection 15 and 16 of section 22a-38.

Attachment F: Environmental Report

Submit as Attachment F, a report and supporting documentation evaluating, as applicable, the effects of the proposed activity on wetlands (functions and values), fish and wildlife resources (habitats and populations), state and federal endangered and threatened species and state species of special concern, stream flows, state water quality standards and designated uses of waters of the state, public water supplies, wastewater treatment needs, the capacity of waters to assimilate wastes, ground water recharge/discharge, ground water availability, private and public water supply wells, agriculture, and water-based recreation.

The evaluation of project effects by the applicant should be based upon but not limited to, the following as applicable:

- instream flow studies;
- vegetation surveys;
- wetland and soil delineations;
- wetland function and value assessments;
- systematic habitat and biological field sampling;
- habitat mapping and habitat evaluations;
- fish and wildlife surveys and population census;
- natural resource inventories, which include natural resource value and impact assessments;
- field surveys for the presence of state and federal species listed as endangered or threatened and for species listed by the state as species of special concern;
- water quality modeling and analyses;
- waste load allocation modeling and analyses;
- water quality testing and evaluations.

All data collection and studies must be performed in accordance with valid and accepted scientific methods, and should identify the following:

- the existing biological, ecological and geological characteristics of all potentially affected areas;
- the nature and extent of any short-term and long-term effects of the proposed activity on such characteristics; and
- the nature and extent of any cumulative effects of the proposed activity on such characteristics.

"Cumulative effects" means the effects of the proposed activity in conjunction with the effects of previous activities and any known future activities proposed in the area by the applicant or by others of record.

Low Flow Analysis

Any description and analysis of expected low stream flow hydraulic effects of the proposed activity shall include the following stream flow durations: seven-day ten-year, seven-day twoyear, thirty-day two-year, and annual average flow. See the "Available Resources" section at the end of these instructions for a list of specific stream/low flow analysis resources.

Attachment G: Mitigation Report

Note: Applicants are strongly advised to consult with biologists in DEEP's WPMD prior to developing or incorporating mitigation plans.

Submit as Attachment G, a mitigation report describing any design elements of the proposed activity which have been incorporated into the plans intended to mitigate wetland, wildlife and fish habitat impacts resulting from the proposed activity. Details of these design elements, including any plans, drawings, and reports, should be included in this attachment.

Regulated activities should be designed to avoid environmental impacts. Environmental impacts that are unavoidable should be minimized. When unavoidable environmental impacts occur as a result of the proposed consumptive diversion, mitigation or compensation for adverse impacts to water supply wells, wildlife and fish habitat, wetlands, watercourses, waterbodies and other natural resources should be incorporated into project plans.

Attachment H: Alternatives Assessment

During project planning particular attention should be given to alternatives which may avoid regulated areas or activities altogether. Where regulated areas or activities cannot be avoided, the least environmentally damaging alternative should be proposed in the application.

All permit applicants should submit as Attachment H, an alternatives assessment consisting of an analysis of alternatives to the proposed activity and documentation that the proposed activity is the least environmentally damaging alternative for fulfilling the basic objective(s) of the applicant. This analysis should consider alternatives which might enhance environmental quality or have a less detrimental effect on the environment than the proposed activity and must demonstrate that there is no *feasible* and *prudent* alternative that will have a less environmentally damaging effect.

An alternative is *feasible* if it is consistent with sound engineering principles. That is, if the applicant can successfully construct or implement the alternative, it is a feasible alternative. An alternative is *prudent* if it is economically reasonable in light of the benefits the activity would provide, but cost alone does not render an alternative imprudent.

The analysis should evaluate at least the following alternatives:

- taking no action;
- postponing action pending further study;
- taking actions of a different nature; and
- conducting the proposed activity at a different location.

To support the analysis of alternatives, documentation must be provided that demonstrates that the proposed activity is:

- necessary;
- the least environmentally damaging design; and
- proposed to take place in the least environmentally damaging location.

This documentation must include, at a minimum, identification and analysis of alternative on-site configurations or designs and alternative off-site locations for the project, and the reasons, including environmental effects and cost factors for each alternative considered, why such alternative designs, configurations, and locations were rejected by the applicant. The onsite alternatives must be shown schematically on a drawing or plan in relation to the proposed activity.

Attachment I: Applicant Compliance Information Form

CGS section 22a-6m provides for DEEP review of an applicant's record of compliance with the environmental laws of Connecticut, any other state and the federal government. Under the law, DEEP may consider the applicant's environmental compliance record, as well as the record of the applicant's principals and any parent companies or subsidiaries, when reviewing a permit application. All permit applications for activities not previously permitted by DEEP must include a completed <u>Applicant Compliance Information Form</u> (DEEP-APP-002) as Attachment I.

Attachment J: Applicant Background Information

All permit applications must include as Attachment J, a completed <u>Applicant</u> <u>Background Information Form</u> (DEEP-APP-008).

Attachment K: Coastal Consistency Review Form

Activities within the state's coastal area must be consistent with the Connecticut Coastal Management Act (CGS sections 22a-90 through 22a-112). You may be required to complete a *Coastal Consistency Review Form* (DEEP-APP-004) to demonstrate that the activity is consistent with the standards and policies of the Connecticut Coastal Management Act. Please refer to the instructions in Part V, item 2, to determine if this requirement pertains to you.

Attachment L: Conservation or Preservation Restriction Information

If the property is subject to a conservation or preservation restriction, submit proof of written notice of this application to the holder of such restriction or a letter from the holder of such restriction verifying that this application is in compliance with the terms of the restriction, as Attachment L.

Attachment M: Fisheries Consultation Form

If the diversion of water for consumptive use involves one of the activities described in Part V, item 6, submit a completed <u>*Fisheries*</u> <u>*Consultation Form*</u>, (DEEP-FISH-APP-007) as Attachment M.

Attachment N: Other Information

Submit as Attachment N, any other information deemed relevant by the applicant or required by DEEP.

Available Resources

Below is a list of possible resources for specific information required for this application. Be sure to also check the DEEP website, <u>www.ct.gov/deep</u> and your local town hall or library for maps and other reference materials.

The DEEP File Room 860-424-4180 is located on the store level at 79 Elm Street, Hartford, CT. Please call in advance for hours of operation.

The <u>DEEP Store</u> 860-424-3555 is only available on line or by phone.

For general assistance regarding the subject permit application contact WPMD at 860-424-3020.

For the subject permit application form, instructions and other required documents visit the DEEP website at: www.ct.gov/deep/inlandwaterpermitapps

- USGS Topographic Map: (USGS) Topographic Map; (www.ct.gov/deep/gis); DEEP Store, 860-424-3555, or USGS Office, 303-202-4700, or US Geological Survey, Western Distribution Branch, Box 25286, Denver Federal Center, Denver, CO 80225 (sells USGS maps and publications) www.usgs.gov
- Endangered or Threatened Species Areas: DEEP File Room; "State and Federal Listed Species and Natural Communities"; <u>www.ct.gov/deep/endangeredspecies</u>
- Aquifer Protection Area Maps: <u>www.ct.gov/deep/aquiferprotection</u>, <u>DEEP Store</u>
- Drinking Water Supply Wells and Reservoirs: For public drinking water supply wells and reservoirs contact the Connecticut Department of Public Health's Drinking Water Section at 860-509-7333. For private wells contact your municipal or district health departments.
- USDA Natural Resource Conservation Service: <u>websoilsurvey.nrcs.usda.gov</u>
- Drainage: Drainage Basins: <u>DEEP Store</u>, "Natural Drainage Basins in Connectiont", 1089.

Drainage Basins in Connecticut", 1988; www.ct.gov/deep/gis

Nosal. T. 1997. Gazetteer of Drainage Areas of Connecticut. Water Resources Bulletin No. 45. Connecticut Department of Energy and Environmental Protection, Natural Resources Center, Geographic Information Center.

• Streamflow:

U.S. Geological Survey StreamStats: <u>https://streamstats.usgs.gov/ss/</u>

Cervione, M. A., R. L. Melvin and K. A. Cyr. 1982. A Method for Estimating the 7-

Day, 10-Year Low Flow of Streams in Connecticut. Connecticut Water Resources Bulletin No. 34. Prepared by U.S. Geological Survey in Cooperation with Connecticut Department of Energy and Environmental Protection.

Weiss, L. A. 1983. Evaluation and design of a Streamflow-Data Network for Connecticut. Connecticut Water Resources Bulletin No. 36. Prepared by U.S. Geological Survey in Cooperation with Connecticut Department of Energy and Environmental Protection.

Cervione, M. A. 1982. StreamflowInformation for Connecticut withApplications to Land-Use Planning.Connecticut Water Resources Bulletin No.35. Prepared by U.S. Geological Survey incooperation with Connecticut Department ofEnergy and Environmental Protection.

• Additional Water Resources Information, Data, Publications, etc. is available through the following web addresses:

USGS Water Resources of the United States <u>water.usgs.gov/</u>

USGS Water Resources Division – Connecticut <u>ct.water.usgs.gov/</u>

USGS Techniques of Water-Resources Investigations Reports may be obtained from water.usgs.gov/pubs/twri/

- Aerial Photographs:
 - CT ECO internet site maintained by the University of Connecticut [www.cteco.uconn.edu]
- Historic Aerial Photographs:
 - State Library: 860-566-4301
 - Connecticut Historical Aerial Photography (Map & Geographic Information Center at UCONN) <u>magic.lib.uconn.edu/</u>

- CT ECO internet site maintained by the University of Connecticut [www.cteco.uconn.edu]
- Wetlands of Connecticut: [www.cteco.uconn.edu]
- National Wetland Inventory Maps: https://www.fws.gov/wetlands/
- Soil Series Description and Delineation: [www.cteco.uconn.edu]
- State and federal statutes and regulations are available for review at various locations:

On the web:

- State Statutes: <u>www.cga.ct.gov/lco/statutes-index.asp</u>
- DEEP website for Statutes and Regulations: <u>www.ct.gov/deep/laws-regs</u>
- US EPA website for Federal Laws, Regulations (Code of Federal Regulations; CFR), Policy, Guidance and Legislation: <u>www.epa.gov/lawsregs</u>

Book Format:

- State Library (Hartford)
- University Law Schools (UCONN-Hartford, Yale)
- Superior Courthouse Libraries (located throughout the state)
- Town Halls and Libraries (statutes)

Affirmative Action, Equal Employment Opportunity and Americans with Disabilities

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.

