



New Jersey Well Vulnerability Survey for Obtaining a Pesticide and/or SOC Waiver

INTRODUCTION

A Synthetic Organic Compound (SOC) Waiver may exempt you from sampling for some or all the SOCs (primarily pesticides) that are part of the federal drinking water monitoring requirements. Without a SOC Waiver, you are required by federal regulations to conduct four rounds of quarterly sampling for certain SOCs. Eligibility for a SOC Waiver may result in a reduction or elimination of the need to monitor at your water system. However, the Bureau of Water System Engineering (Bureau) cannot determine your system's eligibility for a SOC Waiver without a completed Well Vulnerability Survey (Survey).

INSTRUCTIONS

1. To be considered for a SOC Waiver, a completed Survey must be submitted to the Bureau for each well at your system. The Survey will be submitted online through the following link:
https://www.surveymonkey.com/r/NJDEP_WellVulnSurvey_2023.
2. There are five parts, encompassing 29 questions to complete.
3. If more than one well is in use at your system, you must complete a separate Survey for each well listed.
4. There are four attachments, listed below, which will further assist you in filling out the Survey.
5. If you have any questions, email watersupply@dep.nj.gov or call the Bureau at (609) 292-2957.
6. **Complete the Survey(s) by May 1, 2023, for the 2023-2025 compliance period.** It will save you a considerable amount of time and money in monitoring costs and/or possible enforcement actions.

PART A - WELL INFORMATION

Detailed instructions for each question are listed below. Based on the answers provided to Survey Questions 9, 12, 13, 14 and 16, you will be able to select the appropriate calculated fixed radius (CFR) from one of the four tables contained in Attachment 1. The CFR is the answer to Question 17. Once you have determined the CFR, you use it to define an area which surrounds the well. The CFR is the length, in feet, of the radius of a circle that defines the vulnerable area surrounding your well. The vulnerability of your well to contamination is based on well construction, land uses and activities within the CFR area. To demonstrate the concept of the CFR, Figure 2 shows a CFR using the Bureau headquarters as location. There are detailed instructions under Question 18 for determining the correct CFR for each well. The resulting CFR is the region around the well in which you will visually inspect in order to answer the Parts B and C of the Survey.



If the answer to Questions 14 or 16 is unknown, then the CFR cannot be determined, and the well's vulnerability cannot be assessed. Without the CFR, the Survey cannot be completed, and the Bureau cannot consider granting a waiver. As such, if a waiver is desired, it is in the best interest of the water system to find the missing information. The water system/well owner can submit a request to the Bureau for a well record search to locate the missing information or can contact a licensed well driller to take the needed measurements. Attachment 2 contains hyperlinks to more information as well as the request form for a well record search.





QUESTION 1 – Public Water System ID # (PWSID). It starts with letters NJ followed by 7 digits.

QUESTION 2 – Name of the Water System.

QUESTION 3 – Well Name. This information can be found on Drinking Water Watch https://www9.state.nj.us/DEP_WaterWatch_public/

QUESTION 4 – Well Facility ID (WL#####).

QUESTION 5 & 6 – NAD83-NJ ft and WGS84 degrees GPS Coordinates. Below are detailed instructions how to obtain these coordinates.

- Go the homepage for the Bureau of GIS: <https://www.nj.gov/dep/gis/>
- Click on the “Applications” tab.
- Select NJ-GeoWeb.
- Click “Launch GeoWeb” button. A new tab will open showing an interactive map of New Jersey.
- On the top left, look for the “Basemap Gallery” feature (symbol: ). Click on it and select “Imagery.” This will change the map to show aerial imagery and make it easier for you to navigate the map.
- To start looking for the location of your well, on the top right blue toolbar, select the “Searches” tool (third option, magnifying glass symbol: ). In the panel, select “Municipalities” and then choose the correct County and Municipality that the well is located in. Click “Apply.” The map will zoom to and shade in the area.
- Zoom in, and move around for landmarks that are familiar to you, such as streets, houses, lots, etc. Using your knowledge of the area, find where your well would be located at. Once you locate your well, you will then determine your coordinates.
- On the bottom lefthand corner of your screen (below the scale bar), locate the “Click to Enable Clicking Map to Get Coordinates” tool (symbol: ).
- Select the enable button to the left. You will know that you are ready when the coordinates disappear and “Click the map to get coordinates” appear (symbol: ). On the map, click the precise location of the well. A pin will drop, and the coordinates will lock on the bottom lefthand side of the screen. These coordinates will read in NAD83-NJ ft. See Figure 1 for information regarding how to read your coordinates. Record these values for Question 5.



- Click on the up arrow to the right. Select “WGS84 degrees” (top option). The reference system for the coordinates will now be in WGS84 degrees. **The pin you previously dropped will be deleted and the coordinates will unlock.** Re-select the enable button and re-click the precise location of your well to obtain the coordinates (on the bottom righthand side of the screen) to of your well in WGS84 degrees. **You will know that the reference system changed if the units read “degrees.”** Record these values for Question 6.

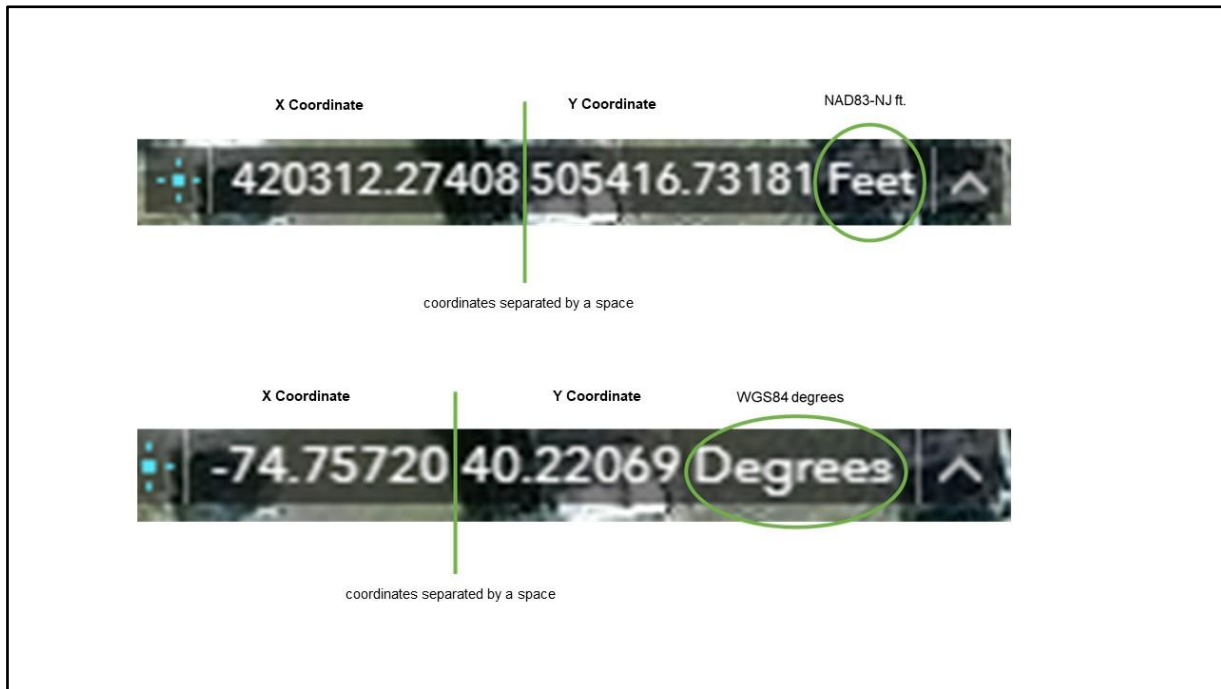


Figure 1. Coordinates obtained through NJ-GeoWeb.

QUESTION 7 – Name of Treatment Plant Facility associated with the well, if applicable. This information can be found on Drinking Water Watch https://www9.state.nj.us/DEP_WaterWatch_public/

QUESTION 8 – Treatment Facility ID (TP#####), if applicable.

QUESTION 9 – Municipality where the well is located.

QUESTION 10 - County where the well is located.

QUESTION 11 – Well Permit #. may be found in the owner’s records or may be labeled on the well head itself. If unknown, request a well record search using the form linked in Attachment 2.



QUESTION 12 – Aquifer Name, may be known by the owner or found on the well record. If unknown, request a well record search using the form linked in Attachment 2 or see Attachment 3 for list of relevant aquifers.

QUESTION 13 – Geologic Formation, may be known by the owner or found on the well record. If unknown, request a well record search using the form linked in Attachment 2 or see Attachment 3 for list of relevant aquifers.

QUESTION 14 – Well Depth (ft.), which can be found on the well permit/record. If unknown, request it using Attachment 2. The Survey cannot be completed without the well depth.

QUESTION 15 – Casing Length (ft.), which can be found on the well permit/record. If unknown, request it using Attachment 2.

QUESTION 16 – Pump Capacity (gpm), which can be found on the well permit/record. If unknown, request it using Attachment 2. The Survey cannot be completed without pump capacity.

QUESTION 17 – CFR (ft.). The Survey cannot be completed without CFR.

Instructions how to find your well's CFR and how to draw a CFR are listed below.

QUESTION 18 – Attach a file containing your CFR drawing.

Finding your well's CFR

STEP A See Attachment 1-Tables used to Determine the Calculated Fixed Radius

There are four tables in Attachment 1 containing CFR values. You need to determine which of these four tables you use for your well. This can be done in two ways. The easiest way (and more precise way) is if you know the aquifer or geologic formation in which your well is screened. You look up the name of the aquifer or geologic formation in Attachment 3. Once you find your aquifer or geologic formation on the list, then you can see which table in Attachment 1 you need to use to identify the correct CFR for your well.

If you do not know the name of the aquifer or geologic formation, then you must look up the county and the municipality in which the well (not the office or treatment facility) is located, using Attachment 4. Once you find the municipality in the list, then you see which table in Attachment 1 you need to use to identify the correct CFR for your well. At this point you should know which of the four tables in Attachment 1 you must refer to and can proceed with Step B.

Step B On the appropriate table in Attachment 1, there are well depth ranges listed horizontally along the top row. From among these ranges, select the one which includes your well's depth, as noted in Question 14. Listed vertically, along the left-hand side of the table are pump capacity ranges. Select the pump capacity range which contains the capacity of your well, as noted in Question 16. Run your finger down the depth column and horizontally along the pump capacity row and find the box where the two intersect. This is your well's CFR.

STEP C Use this CFR to answer Question 17. This value is the length, in feet, of the radius of a circle around your well, which you must visually inspect to answer the vulnerability questions in Part B and Part C.



Drawing your CFR

- NJ-GeoWeb is not equipped to allow you to add a radius buffer. So instead, you will use a publicly available tool, such as Map Developers: <https://www.mapdevelopers.com/>
- In the “Map Tools” tab, select “Draw a Circle Tool.”
- For **Address** – use the coordinates for your well in WGS84 degrees (NAD83-NJ ft will not work). **Note: NJ-GeoWeb gives coordinates in (X coordinate, Y coordinate). For your location to project correctly on Map Developers, you need to input your coordinates as Y coordinate, X coordinate – as in, switch your coordinates around.** Do not use parentheses and do separate your coordinates by a comma. After, click “Zoom to Address” to focus the map around your well.
- For **Radius** – input the value you calculated for your well’s CFR. In the unit box, select “Feet.” Click “New Circle” and your CFR radius will be added to the map.
- **If your point does not align with where your well should be**, you can click and drag to reposition the point and circle. You do not need to update your coordinates for Questions 5 and 6.
- On the top righthand corner of the map, click “Toggle full screen view” to make the map full screen.
- On the top lefthand side on the screen click “Satellite” to view the land use within the CFR area of the well. Zoom in and out, left to right, etc. center your map on the screen. Once satisfied, take a screenshot, and your map will save as an image in your Pictures documents. Rename your file as using the template: PSWID_WELLID. Upload this image to your 2023-2025 SOC Waiver Survey for Question 18.



Figure 2. Example CFR from WebDevelopers



Part B - Current Land Use Survey

Once you have determined the CFR, go to your well site and inspect the CFR area for each of the five land use categories in Question 19.

Part C - Current Activities Survey

Visually inspect the area within the CFR to indicate whether a particular activity occurs within by placing a checkmark by all activities listed in Question 21 that apply to your well.

Part D - Additional Information

Indicate the answer to Questions 22 through 26 with a "yes" or "no" answer.

Part E - Survey Certification

The person who signs (ie. Is the person whose contact information is provided) the Survey should be 1) the owner or operator of the water system, or 2) a designated representative authorized to sign and to accept responsibility for the answers provided in the Survey.



ATTACHMENT 1. TABLES USED TO DETERMINE THE CALCULATED FIXED RADIUS

TABLE 1. UNCONSOLIDATED SANDS, GRAVELS AND CLAYS (POROSITY VALUE = 0.23)

DEPTH (FT)	0-50	51-100	101-200	201-300	301-400	> 400
PUMP CAPACITY (GPM)						
<25	490	350	250	200	170	160
25-50	700	490	350	280	250	220
51-100	990	700	490	400	350	310
101-200	1390	990	700	570	500	440
201-300	1710	1210	850	700	600	540
301-400	1970	1390	990	810	700	620
401-500	2210	1560	1110	900	780	700
501-600	2420	1710	1210	990	850	760
601-700	2600	1850	1300	1070	920	830
701-800	2790	1970	1390	1140	990	880
801-900	2960	2090	1480	1210	1050	940
> 900	3120	2210	1560	1270	1100	990

TABLE 2. BASALT, DIABASE, SHALES, METAMORPHICS AND IGNEOUS (POROSITY VALUE = 0.05)

DEPTH (FT)	0-50	51-100	101-200	201-300	301-400	> 400
PUMP CAPACITY (GPM)						
<25	1060	750	530	430	370	330
25-50	1500	1060	750	610	530	470
51-100	2200	1500	1060	860	750	670
101-200	2990	2120	1500	1220	1060	950
201-300	3660	2590	1830	1500	1300	1160
301-400	4230	2990	2120	1730	1500	1340
401-500	4730	3350	2370	1930	1670	1500
501-600	5180	3660	2590	2120	1830	1640
601-700	5600	3960	2800	2290	1980	1770
701-800	5980	4230	2990	2440	2120	1890
801-900	6350	4490	3170	2590	2240	2010
> 900	6850	4730	3350	2730	2370	2120



TABLE 3. GLACIAL VALLEY FILLS (POROSITY VALUE =0.25)

DEPTH (FT)	0-50	51-100	101-200	201-300	301-400	> 400
PUMP CAPACITY (GPM)						
<25	470	330	240	190	170	150
25-50	670	470	330	270	240	210
51-100	950	670	470	390	330	300
101-200	1340	950	670	550	470	420
201-300	1640	1160	820	670	580	520
301-400	1890	1340	950	770	670	600
401-500	2120	1500	1060	860	750	670
501-600	2320	1640	1160	950	820	730
601-700	2500	1770	1250	1020	890	790
701-800	2680	1890	1340	1090	950	850
801-900	2840	2010	1420	1160	1000	900
> 900	2990	2120	1500	1220	1060	950

TABLE 4. SANDSTONES AND LIMESTONES (POROSITY VALUE= 0.15)

DEPTH (FT)	0-50	51-100	101-200	201-300	301-400	> 400
PUMP CAPACITY (GPM)						
<25	610	430	310	250	220	190
25-50	860	610	430	350	310	270
51-100	1220	860	610	500	430	390
101-200	1730	1220	860	710	610	550
201-300	2120	1500	1060	860	750	670
301-400	2440	1730	1220	1000	860	770
401-500	2730	1930	1370	1120	970	860
501-600	2990	2120	1500	1220	1060	950
601-700	3230	2290	1620	1320	1140	1020
701-800	3450	2440	1730	1410	1220	1090
801-900	3660	2590	1830	1500	1300	1160
> 900	3860	2730	1930	1580	1370	1220



ATTACHMENT 2. WELL RECORD REQUEST FORM

Individual Well Search Questionnaire:

https://www.state.nj.us/dep/watersupply/pdf/well_questionnaire.pdf

Instructions / Required Information for an Individual Well Information Search:

https://www.state.nj.us/dep/watersupply/pdf/well_instructions.pdf



**ATTACHMENT 3. CFR TABLE SELECTION BASED ON
GEOLOGIC FORMATION OR AQUIFER NAME**

GEOLOGIC FORMATION OR AQUIFER NAMES (Parentheses Contain Formations, Members and Type Lists)	APPROPRIATE CFR TABLE
Albite Oligoclase Granite	Table 2
Allentown Dolomite (Upper, Limeport)	Table 4
Alluvial Deposits (Alluvium, Beach Sand, Channel Deposits, Colluvium, Deltaic Sediments, Eolian, Estuarine Deposits, Fans, Floodplain Deposits, Fluvial Deposits, Gravels, Sands)	Table 1
Amphibolite	Table 2
Basalt (1st/2nd/3rd Watchung Flows, Hook Mt., Orange Mt, Preakness, Weathered)	Table 2
Beacon Hill Gravel	Table 1
Beekmantown Group (Upper, Lower)	Table 4
Beemerville Intrusive Suite	Table 2
Bellvale Sandstone	Table 4
Berkshire Valley Formation	Table 4
Biotite Granite	Table 2
Bloomsburg Red Beds	Table 2
Boonton Formation	Table 4
Bossardville Limestone	Table 4
Bridgeton Formation	Table 1
Brunswick Sedimentary Group	Table 4
Buttermilk Falls Limestone	Table 4
Byram Intrusive Suite	Table 2
Cape May Sands	Table 1
Chestnut Hill Formation	Table 2
Coeymans Formation (Depue Limestone, Peters Valley, Ravena Shawnee, Stormville)	Table 4
Cohansey Sand	Table 1
Cohansey-Kirkwood Aquifer	Table 1
Conglomerate (Connelly, Greenpond, Skunnemunk, Limestone)	Table 2



GEOLOGIC FORMATION OR AQUIFER NAMES (Parentheses Contain Formations, Members and Type Lists)	APPROPRIATE CFR TABLE
Cornwall Shale	Table 2
Decker Formation (Clove Brook, Wallpack)	Table 4
Diabase (Late Proterozoic, Weathered)	Table 2
Diorite	Table 2
Englishtown Formation (or Aquifer)	Table 1
Epler Formation (Branchville, Lafayette, Big Springs)	Table 4
Esopus Formation	Table 2
Feltville Formation	Table 4
Franklin Limestone	Table 2
Glacial Deposits (Delta, Lag, Lake, Lake Bottom, Moraine, Till, Tillstone)	Table 4
Glacial Deposits (Kame, Kame Terrace, Lacustrine Fan, Lacustrine Bottom, Meltwater Terrace, Stratified Drift, Valley Outwash)	Table 3
Glenarie Formation	Table 4
Gneiss (Baltimore, Biotite-Plagioclase, Monazite, Potassic-Feldspar, Precambrian, Syenite, Weathered, Wissahickon)	Table 2
Granite (Alaskite, Biotite, Hornblende, Mt. Eve, Precambrian, Pyroxene Syenite, Quartzite)	Table 2
Graybed Hornfels	Table 2
Green Pond Conglomerate	Table 2
Hammer Creek Formation	Table 2
Hardyston Quartzite	Table 2
High Falls Formation	Table 2
Holly Beach Water-bearing Zone	Table 1
Hornerstown Sand	Table 1
Hornfel	Table 2
Jacksonburg Limestone (Cement Limestone Facie, Cement Rock Facie, Wantage Sequence)	Table 4
Jutland Klippe Sequence (Unit A, Unit B)	Table 4
Kalkberg Limestone	Table 4



GEOLOGIC FORMATION OR AQUIFER NAMES (Parentheses Contain Formations, Members and Type Lists)	APPROPRIATE CFR TABLE
Kanouse Sandstorm	Table 2
Kirkwood Formation (Upper Sand, Lower Sand, 800 Ft. Sand, Rio-Grande)	Table 1
Kittatinny Supergroup (Lower, Middle Limestone)	Table 4
Lake Hopatcong Intrusive Suite	Table 2
Lamprophyre and Related Rocks	Table 2
Leithsville Formation (Califon, Hamburg, Wallkill)	Table 4
Lockatong Formation	Table 2
Longwood Shale	Table 2
Losee Metamorphic Suite	Table 2
Magothy Formation (Amboy Stoneware Clay, Old Bridge Sand, Sayerville Sand, South Amboy Fire Clay)	Table 1
Manasquan Formation (Manasquan-Vincentown)	Table 1
Manhattan Schist	Table 2
Manlius Limestone (Thacker Member)	Table 4
Marble	Table 2
Marcellus Shale	Table 2
Marshalltown Formation	Table 1
Martinsburg Shale (Bushkill, High Point, Pen Argyl, Ramseyburg)	Table 2
Merchantville Formation	Table 1
Metasedimentary Rocks	Table 2
Microantiperthite Alaskite	Table 2
Migmatite	Table 2
Minisink Limestone	Table 4
Mt. Laurel Formation	Table 1
Mt. Laurel & Wenonah Sands	Table 1
Navesink Formation	Table 1
Nepheline Syenite	Table 2



GEOLOGIC FORMATION OR AQUIFER NAMES (Parentheses Contain Formations, Members and Type Lists)	APPROPRIATE CFR TABLE
New Scotland Formation (Flatbrookville)	Table 2
Onondaga Limestone	Table 4
Ontelaunee Formation (Beaver Run, Harmonyvale)	Table 4
Oriskany Group	Table 2
Ouachitite Breccia, Volcanic Breccia	Table 4
Passaic Formation	Table 4
Pennsauken Formation (Pennsauken-Bridgeton)	Table 1
Piney Point Aquifer	Table 1
Port Ewen Shale	Table 2
Potomac Formation (Upper, Middle, Lower)	Table 1
Poxono Island Formation	Table 2
Raritan Form. (Farrington Sand, Fire Clay, Sayreville Sand, Woodbridge Clay)	Table 1
Red-bed Hornfels	Table 2
Red Bank Sand	Table 1
Rickenback Dolomite (Hope, Lower)	Table 4
Ridgely Sandstone	Table 4
Rondout Formation (Duttonville, Mashipacong, Whiteport Dolomite)	Table 4
Schoharie Formation	Table 2
Serpentinite	Table 2
Shark River Formation	Table 1
Shawangunk Formation	Table 2
Shriver Chert	Table 2
Skunnemunk Conglomerate	Table 2
Stockton Formation	Table 4
Stonehenge Formation	Table 2
Swamp and Marsh Deposits	Table 3
Tinton Sand	Table 1



GEOLOGIC FORMATION OR AQUIFER NAMES (Parentheses Contain Formations, Members and Type Lists)	APPROPRIATE CFR TABLE
Towaco Formation	Table 3
Vincentown Formation (Vincentown-Hornerstown)	Table 1
Weathered Carbonate	Table 4
Weathered (Basalt, Conglomerate, Diabase, Gneiss, Mudstone, Quartzite, Sandstone, Schist, Shale, Slate)	Table 2
Wenonah Formation	Table 1
Woodbury Clay (Woodbury-Merchantville)	Table 1



ATTACHMENT 4. CFR TABLE SELECTION BASED ON MUNICIPALITY

COUNTY	MUNICIPALITY	CFR TABLE
Atlantic	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Bergen	Allendale Boro	Table 4
Bergen	Alpine Boro	Table 2
Bergen	Bergenfield Boro	Table 4
Bergen	Bogota Boro	Table 4
Bergen	Carlstadt Boro	Table 4
Bergen	Cliffside Park Boro	Table 2
Bergen	Closter Boro	Table 4
Bergen	Cresskill Boro	Table 4
Bergen	Demarest Boro	Table 4
Bergen	Dumont Boro	Table 4
Bergen	East Rutherford Boro	Table 4
Bergen	Edgewater Boro	Table 2
Bergen	Elmwood Park Boro	Table 4
Bergen	Emerson Boro	Table 4
Bergen	Englewood City	Table 2
Bergen	Englewood Cliffs Boro	Table 2
Bergen	Fair Lawn Boro	Table 4
Bergen	Fairview Boro	Table 2
Bergen	Fort Lee Boro	Table 2
Bergen	Franklin Lakes Boro	Table 2
Bergen	Garfield City	Table 4
Bergen	Glen Rock Boro	Table 4



Bergen	Hackensack City	Table 4
Bergen	Harrington Park Boro	Table 4
Bergen	Hasbrouck Heights Boro	Table 4
Bergen	Haworth Boro	Table 4
Bergen	Hillsdale Boro	Table 4
Bergen	Hohokus Boro	Table 4
Bergen	Leonia Boro	Table 4
Bergen	Little Ferry Boro	Table 4
Bergen	Lodi Boro	Table 4
Bergen	Lyndhurst Twp.	Table 4
Bergen	Mahwah Twp.	Table 2
Bergen	Maywood Boro	Table 4
Bergen	Midland Park Boro	Table 4
Bergen	Montvale Boro	Table 4
Bergen	Moonachie Boro	Table 4
Bergen	New Milford Boro	Table 4
Bergen	North Arlington Boro	Table 4
Bergen	Northvale Boro	Table 4
Bergen	Norwood Boro	Table 4
Bergen	Oakland Boro	Table 2
Bergen	Old Tappan Boro	Table 4
Bergen	Oradell Boro	Table 4
Bergen	Palisades Park Boro	Table 2
Bergen	Paramus Boro	Table 4
Bergen	Park Ridge Boro	Table 4
Bergen	Ramsey Boro	Table 4
Bergen	Ridgefield Boro	Table 4
Bergen	Ridgefield Park Village	Table 4
Bergen	Ridgewood Village	Table 4



Bergen	River Edge Boro	Table 4
Bergen	River Vale Twp	Table 4
Bergen	Rochelle Park Twp	Table 4
Bergen	Rockleigh Boro	Table 4
Bergen	Rutherford Boro	Table 4
Bergen	Saddle Brook Twp	Table 4
Bergen	Saddle River Boro	Table 4
Bergen	South Hackensack Twp	Table 4
Bergen	Teaneck Twp	Table 4
Bergen	Tenafly Boro	Table 2
Bergen	Teterboro Boro	Table 4
Bergen	Upper Saddle River Boro	Table 4
Bergen	Waldwick Boro	Table 4
Bergen	Wallington Boro	Table 4
Bergen	Washington Twp	Table 4
Bergen	Westwood Boro	Table 4
Bergen	Woodcliff Lake Boro	Table 4
Bergen	Wood-Ridge Boro	Table 4
Bergen	Wyckoff Twp	Table 4

COUNTY	MUNICIPALITY	CFR TABLE
Burlington	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Camden	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Cape May	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Cumberland	ALL MUNICIPALITIES	Table 1



COUNTY	MUNICIPALITY	CFR TABLE
Essex	Belleville Town	Table 4
Essex	Bloomfield Town	Table 4
Essex	Caldwell Boro	Table 2
Essex	Cedar Grove Twp	Table 2
Essex	East Orange City	Table 4
Essex	Essex Fells Boro	Table 2
Essex	Fairfield Boro	Table 3
Essex	Glen Ridge Boro	Table 4
Essex	Irvington Town	Table 4
Essex	Livingston Twp	Table 2
Essex	Maplewood Twp	Table 4
Essex	Millburn Twp	Table 2
Essex	Montclair Town	Table 4
Essex	Newark City	Table 4
Essex	North Caldwell Boro	Table 2
Essex	Nutley Town	Table 4
Essex	Orange City	Table 4
Essex	Roseland Boro	Table 2
Essex	South Orange Village	Table 4
Essex	Verona Boro	Table 2
Essex	West Caldwell Boro	Table 2
Essex	West Orange Town	Table 2

COUNTY	MUNICIPALITY	CFR TABLE
Gloucester	ALL MUNICIPALITIES	Table 1



COUNTY	MUNICIPALITY	CFR TABLE
Hudson	Bayonne City	Table 2
Hudson	East Newark Boro	Table 4
Hudson	Guttenberg Town	Table 2
Hudson	Harrison Town	Table 4
Hudson	Hoboken City	Table 2
Hudson	Jersey City	Table 2
Hudson	Kearny Town	Table 4
Hudson	North Bergen Twp.	Table 2
Hudson	Secaucus Twp	Table 4
Hudson	Union City	Table 2
Hudson	Weehawken Twp	Table 2
Hudson	West New York Town	Table 2



COUNTY	MUNICIPALITY	CFR TABLE
Hunterdon	Alexandria Twp	Table 2
Hunterdon	Bethlehem Twp	Table 2
Hunterdon	Bloomsbury Boro	Table 4
Hunterdon	Califon Boro	Table 2
Hunterdon	Clinton Town	Table 2
Hunterdon	Clinton Twp	Table 2
Hunterdon	Delaware Twp	Table 2
Hunterdon	East Amwell Twp	Table 2
Hunterdon	Flemington Boro	Table 4
Hunterdon	Franklin Twp	Table 2
Hunterdon	Frenchtown Boro	Table 4
Hunterdon	Glen Gardner Boro	Table 2
Hunterdon	Hampton Boro	Table 2
Hunterdon	High Bridge Boro	Table 2
Hunterdon	Holland Twp	Table 2
Hunterdon	Kingwood Twp	Table 2
Hunterdon	Lambertville City	Table 2
Hunterdon	Lebanon Boro	Table 2
Hunterdon	Lebanon Twp	Table 2
Hunterdon	Milford Boro	Table 4
Hunterdon	Raritan Twp	Table 2
Hunterdon	Readington Twp	Table 4
Hunterdon	Stockton Boro	Table 4
Hunterdon	Tewksbury Twp	Table 2
Hunterdon	Union Twp	Table 2
Hunterdon	West Amwell Twp	Table 2



COUNTY	MUNICIPALITY	CFR TABLE
Mercer	East Windsor Twp	Table 1
Mercer	Ewing Twp	Table 2
Mercer	Hamilton Twp	Table 1
Mercer	Hightstown Boro	Table 1
Mercer	Hopewell Boro	Table 2
Mercer	Hopewell Twp	Table 2
Mercer	Lawrence Twp	Table 2
Mercer	Pennington Boro	Table 4
Mercer	Princeton Boro	Table 2
Mercer	Princeton Twp	Table 2
Mercer	Trenton City	Table 2
Mercer	Washington Twp	Table 1
Mercer	West Windsor Twp	Table 4

COUNTY	MUNICIPALITY	CFR TABLE
Middlesex	Carteret Boro	Table 4
Middlesex	Cranbury Twp	Table 4
Middlesex	Dunellen Boro	Table 1
Middlesex	East Brunswick Twp	Table 1
Middlesex	Edison Twp	Table 4
Middlesex	Helmetta Boro	Table 1
Middlesex	Highland Park Boro	Table 4
Middlesex	Jamesburg Boro	Table 1
Middlesex	Metuchen Boro	Table 4
Middlesex	Middlesex Boro	Table 4
Middlesex	Milltown Boro	Table 4
Middlesex	Monroe Twp	Table 1
Middlesex	New Brunswick City	Table 4



Middlesex	North Brunswick Twp	Table 4
Middlesex	Old Bridge Twp	Table 1
Middlesex	Perth Amboy City	Table 1
Middlesex	Piscataway Twp	Table 4
Middlesex	Plainsboro Twp	Table 2
Middlesex	Sayreville Boro	Table 1
Middlesex	South Amboy City	Table 1
Middlesex	South Brunswick Twp	Table 2
Middlesex	South Plainfield Boro	Table 4
Middlesex	South River Boro	Table 1
Middlesex	Spotswood Boro	Table 1
Middlesex	Woodbridge Twp	Table 4

COUNTY	MUNICIPALITY	CFR TABLE
Monmouth	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Morris	Boonton Town	Table 2
Morris	Boonton Twp	Table 2
Morris	Butler Boro	Table 2
Morris	Chatham Boro	Table 2
Morris	Chatham Twp	Table 2
Morris	Chester Boro	Table 2
Morris	Chester Twp	Table 2
Morris	Denville Twp	Table 2
Morris	Dover Town	Table 2
Morris	East Hanover Twp	Table 4
Morris	Florham Park Boro	Table 4
Morris	Hanover Twp	Table 4
Morris	Harding Twp	Table 2
Morris	Jefferson Twp	Table 2
Morris	Kinnelon Boro	Table 2



Morris	Lincoln Park Boro	Table 2
Morris	Madison Boro	Table 4
Morris	Mendham Boro	Table 2
Morris	Mendham Twp	Table 2
Morris	Mine Hill Twp	Table 2
Morris	Montville Twp	Table 2
Morris	Morris Plains Boro	Table 2
Morris	Morris Twp	Table 2
Morris	Morristown Town	Table 2
Morris	Mount Arlington Boro	Table 2
Morris	Mount Olive Twp	Table 2
Morris	Mountain Lakes Boro	Table 2
Morris	Netcong Boro	Table 2
Morris	Parsippany-Troy Hills Twp	Table 4
Morris	Passaic Twp	Table 2
Morris	Pequannock Twp	Table 4
Morris	Randolph Twp	Table 2
Morris	Riverdale Boro	Table 2
Morris	Rockaway Boro	Table 2
Morris	Rockaway Twp	Table 2
Morris	Roxbury Twp	Table 2
Morris	Victory Gardens Boro	Table 2
Morris	Washington Twp	Table 2
Morris	Wharton Boro	Table 2

COUNTY	MUNICIPALITY	CFR TABLE
Ocean	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Passaic	Bloomington Boro	Table 2
Passaic	Clifton City	Table 4
Passaic	Haledon Boro	Table 2



Passaic	Hawthorne Boro	Table 4
Passaic	Little Falls Twp	Table 2
Passaic	North Haledon Boro	Table 2
Passaic	Passaic City	Table 4
Passaic	Paterson City	Table 4
Passaic	Pompton Lakes Boro	Table 2
Passaic	Prospect Park Boro	Table 2
Passaic	Ringwood Boro	Table 2
Passaic	Totowa Boro	Table 2
Passaic	Wanaque Boro	Table 2
Passaic	Wayne Twp	Table 2
Passaic	West Milford Twp	Table 2
Passaic	West Paterson Boro	Table 2

COUNTY	MUNICIPALITY	CFR TABLE
Salem	ALL MUNICIPALITIES	Table 1

COUNTY	MUNICIPALITY	CFR TABLE
Somerset	Bedminster Twp	Table 4
Somerset	Bernards Twp	Table 2
Somerset	Bernardsville Boro	Table 2
Somerset	Bound Brook Boro	Table 4
Somerset	Branchburg Twp	Table 4
Somerset	Bridgewater Twp	Table 2
Somerset	Far Hills Boro	Table 2
Somerset	Franklin Twp	Table 4
Somerset	Green Brook Twp	Table 2
Somerset	Hillsborough Twp	Table 4
Somerset	Manville Boro	Table 4
Somerset	Millstone Boro	Table 4
Somerset	Montgomery Twp	Table 4



Somerset	North Plainfield Boro	Table 4
Somerset	Peapack Gladstone Boro	Table 2
Somerset	Raritan Boro	Table 4
Somerset	Rocky Hill Boro	Table 4
Somerset	Somerville Boro	Table 4
Somerset	South Bound Brook Boro	Table 4
Somerset	Warren Twp	Table 2
Somerset	Watchung Boro	Table 2

COUNTY	MUNICIPALITY	CFR Table
Sussex	ALL MUNICIPALITIES	Table 2

COUNTY	MUNICIPALITY	CFR TABLE
Union	Berkeley Heights Twp	Table 2
Union	Clark Twp	Table 4
Union	Cranford Twp	Table 4
Union	Elizabeth City	Table 4
Union	Fanwood Boro	Table 4
Union	Garwood Boro	Table 4
Union	Hillside Twp	Table 4
Union	Kenilworth Boro	Table 4
Union	Linden City	Table 4
Union	Mountainside Boro	Table 2
Union	New Providence Boro	Table 2
Union	Plainfield City	Table 4
Union	Rahway City	Table 4
Union	Roselle Boro	Table 4
Union	Roselle Park Boro	Table 4
Union	Scotch Plains Twp	Table 4
Union	Springfield Twp	Table 2
Union	Summit City	Table 2
Union	Union Twp	Table 4



Union	Westfield Town	Table 4
Union	Winfield Twp	Table 4

COUNTY	MUNICIPALITY	TABLE
Warren	Allamuchy Twp	Table 2
Warren	Alpha Boro	Table 4
Warren	Belvidere Town	Table 4
Warren	Blairstown Twp	Table 2
Warren	Franklin Twp	Table 2
Warren	Frelinghuysen Twp	Table 2
Warren	Greenwich Twp	Table 4
Warren	Hackettstown Town	Table 4
Warren	Hardwick Twp	Table 2
Warren	Harmony Twp	Table 2
Warren	Hope Twp	Table 2
Warren	Independence Twp	Table 2
Warren	Knowlton Twp	Table 2
Warren	Liberty Twp	Table 2
Warren	Lopatcong Twp	Table 2
Warren	Mansfield Twp	Table 2
Warren	Oxford Twp	Table 2
Warren	Pahaquarry Twp	Table 2
Warren	Phillipsburg Twp	Table 4
Warren	Pohatcong Twp	Table 2
Warren	Washington Boro	Table 2
Warren	Washington Twp	Table 2
Warren	White Twp	Table 2