Species Status Assessment

Common Name: Blackwater bluet **Date Updated:** March 2025

Scientific Name: *Enallagma weewa* **Minor Edits by:** NYSDEC Wildlife Section

Class: Insecta

Family: Coenagrionidae

Species Synopsis *(a short paragraph which describes species taxonomy, distribution, recent trends, and habitat in New York):*

Blackwater Bluets were first documented in the state in Suffolk county in 1998 by Steve Walter. As part of the NYDDS, it was documented here again in 2005 and also one other location in Suffolk county (Donnelly 1999). In New York, *E. weewa* is known from lentic habitats including a lake. However, throughout most of its range in the Northeast, this species is known to inhabit slow streams and rivers, sometimes wooded or flowing through swamps, usually with sandy substrates (Lam 2004, Paulson 2011, NatureServe 2013).

DEC is not aware of any additional data or new information on population trends or threats to this species since the last SWAP revision in 2015 to indicate a need for change in SGCN status

I. Status

a. Current legal protected Status

i. **Federal:** Not listed **Candidate:** No

ii. **New York:** Not listed

b. Natural Heritage Program

i. **Global:** G5

ii. **New York:** S1 **Tracked by NYNHP?:** Yes

Other Ranks:

-NYS 2025 SGCN Status: SGCN

-IUCN Red List: Least Concern

-Northeast Regional SGCN: Watchlist

Status Discussion:

E. weewa is currently documented in two extant locations in Suffolk county. While historically known from this county, it is currently known from only these two locations in the state.

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown			-
Northeastern US	Yes	Stable	Stable			-
New York	Yes	Stable	Stable	First record from Suffolk county Cranberry Bog County Pk in 1998; still present here in 2005, but only two extant occurrences there. Only known from state since late 1990s		Yes
Connecticut	No	-	-			-
Massachusetts	No	-	-			-
New Jersey	Yes	Declining	Declining	Historic-2015 records		-
Pennsylvania	No	-	-			-
Vermont	No	-	-			-
Ontario	No	-	-			-
Quebec	No	-	-			-

Column options
Present?: Yes; No; Unknown; No data; (blank) or Choose an Item
Abundance and Distribution: Declining; Increasing; Stable; Unknown; Extirpated; N/A; (blank) or Choose an item
SGCN?: Yes; No; Unknown; (blank) or Choose an item

Monitoring in New York *(specify any monitoring activities or regular surveys that are conducted in New York):*

The New York State Dragonfly and Damselfly Survey was conducted from 2005-2009, but there are no organized, regular monitoring or survey activities directed toward this species or to sites where it has been documented.

Trends Discussion *(insert map of North American/regional distribution and status):*

The species was first documented in the state in Suffolk county in 1998 by Steve Walter. As part of the NYDDS, it was documented here again in 2005 and also two other locations in Suffolk county (Donnelly 1999).

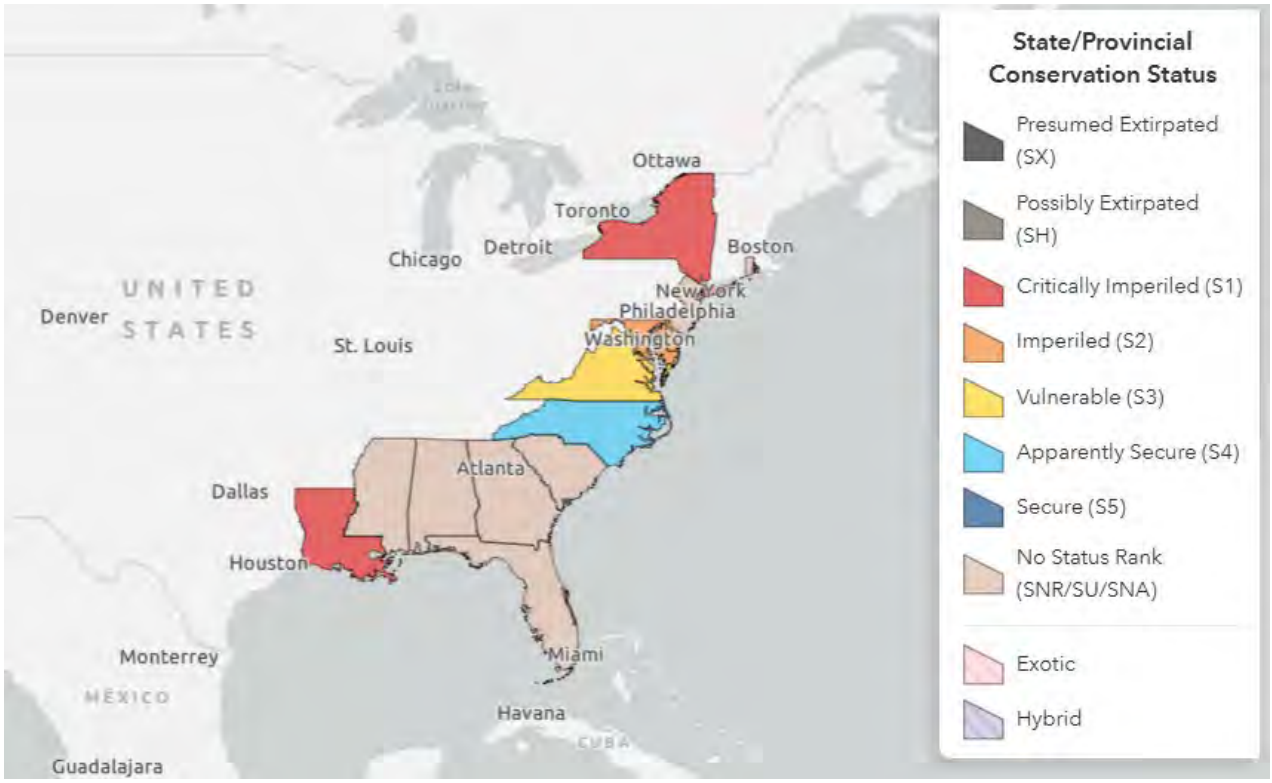

Figure 1. Conservation Status of *Enallagma weewa* in North America (NatureServe 2025).

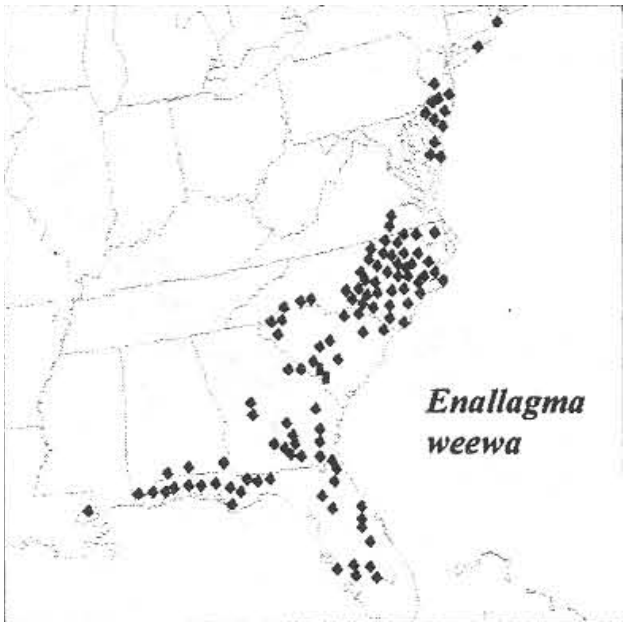

Figure 2. Distribution of Blackwater Bluet in North America (Donnelly 2004).

III. **New York Rarity** *(provide map, numbers, and percent of state occupied)*

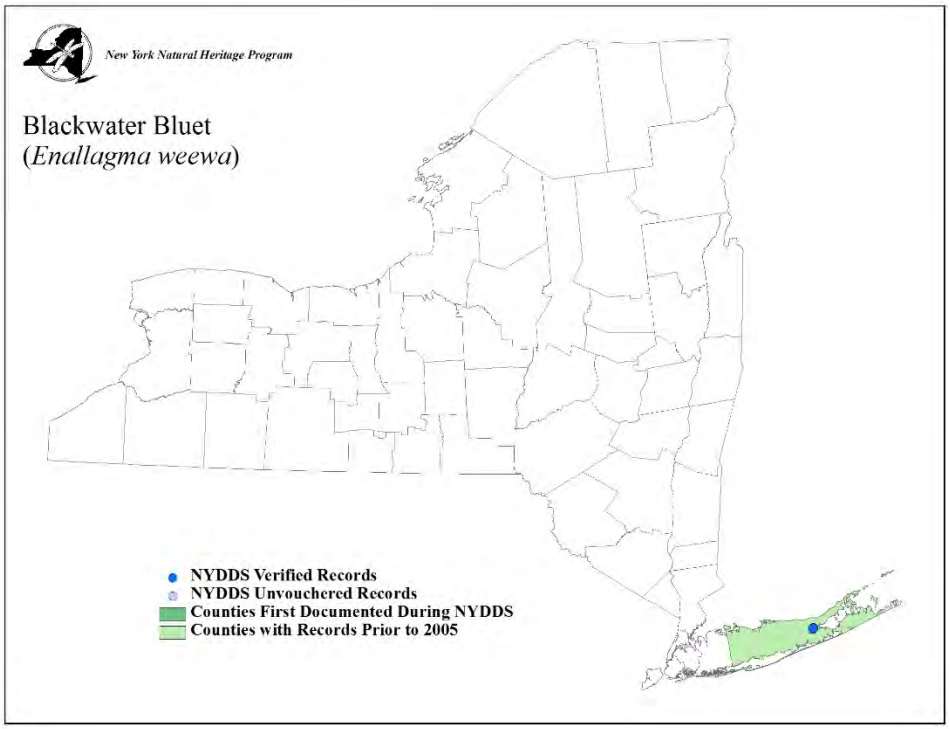

Figure 3. Occurrence of Blackwater Bluet in New York (White *et al.* 2010).

Details of historic and current occurrence:

There are no known NY records prior to 1998.

A single record from Cranberry Bog County Park in Riverhead, Suffolk County exists from 1998. This was reconfirmed during the NYDDS and one additional location was documented in 2005: Wildwood Lake (New York Natural Heritage Program 2010). Interestingly, this species is known as a lotic species throughout its range and rarely found in lakes; however, all known NY locations are lentic.

New York's Contribution to Species North American Range:

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	

Column options
Percent of North American Range in NY: 100% (endemic); 76-99%; 51-75%; 26-50%; 1-25%; 0%; Choose an item
Classification of NY Range: Core; Peripheral; Disjunct; (blank) or Choose an item

IV. Primary Habitat or Community Type *(from NY crosswalk of NE Aquatic, Marine, or Terrestrial Habitat Classification Systems):*

a. Low-gradient Rivers and Large Streams

b. Moderate-High gradient Rivers and Large Streams

c. Rarely occurs in some lentic habitats including lakes

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/Increase
No	No	Unknown	

Column options
Habitat Specialist and Indicator Species: Yes; No; Unknown; (blank) or Choose an item
Habitat/Community Trend: Declining; Stable; Increasing; Unknown; (blank) or Choose an item

Habitat Discussion:

In New York, *E. weewa* is known from lentic habitats including a lake. However, throughout most of its range in the Northeast, this species is known to inhabit slow streams and rivers, sometimes wooded or flowing through swamps, usually with sandy substrates (Lam 2004, Paulson 2011, NatureServe 2013).

V. Species Demographic, and Life History:

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/ Catadromous?
Yes	-	-	Yes	Yes	-

Column options
First 5 fields: Yes; No; Unknown; (blank) or Choose an item
Anadromous/Catadromous: Anadromous; Catadromous; (blank) or Choose an item

Species Demographics and Life History Discussion *(include information about species life span, reproductive longevity, reproductive capacity, age to maturity, and ability to disperse and colonize):*

Damselflies undergo incomplete metamorphosis and live as aquatic larvae in streams and rivers before emerging into a terrestrial adult life stage. Adults live for a single warm season (few months), while larvae may live for a year or longer, depending on the species and environmental conditions. They have the ability to disperse as larvae through connected waterways if conditions are suitable and adults have the ability to disperse to new suitable habitats by flight. Paulson (2011) indicates females and immatures of this species use thickets adjacent to their breeding habitats.

Flight season is from June through September in NJ (Paulson 2011), and all NY records have been documented in July or August (White *et al.* 2010).

VI. Threats *(from NY 2015 SWAP or newly described):*

Any activity which might lead to water contamination or the alteration of natural hydrology could impact Blackwater Bluet populations (NYSDEC 2005). Such threats might include roadway and agricultural run-off, ditching and filling, eutrophication and nutrient loading from fertilizers, herbicides, and septic systems, changes in dissolved oxygen content, and development (NYSDEC 2005). Groundwater withdrawal is a potential threat in lentic habitats on Long Island. The introduction of grass carp is also a threat to coastal plain ponds on Long Island. In addition, both emergence rates and/or species ranges may shift for odonate species as a result of climate change (Kalkman *et al.* 2008).

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
1. Residential and Commercial	1.1 Housing & Urban Areas	(habitat loss from lakeside development)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.2 Dams & Water Management/Use	(alteration of hydrology)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.1 Domestic & Urban Wastewater	9.1.1 Domestic wastewater (lawn care)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.1 Invasive Non-Native Plants & Animals	8.1.3 Aquatic animals (grass carp)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.1 Invasive Non-Native Plants & Animals	8.1.4 Aquatic plants (phragmites)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1.Threats to *Enallagma weewa.*

Are there regulatory mechanisms that protect the species or its habitat in New York?

Yes: X **No: _____** **Unknown: _____**

If yes, describe mechanism and whether adequate to protect species/habitat:

Article 15 of Environmental Conservation Law provides some protection of rivers, streams, lakes and ponds through the Protection of Waters Program.

Describe knowledge of management/conservation actions that are needed for recovery/conservation, or to eliminate, minimize, or compensate for the identified threats:

Any efforts to reduce roadway and agricultural run-off, eutrophication, development of upland borders to ponds and resulting increased groundwater withdrawal, invasive plant and animal species, trampling of vegetation from recreation, and ditching and filling activities should be considered when managing for this species (NYS DEC 2006, White et al. 2010). Maintenance or restoration of native shoreline vegetation and surrounding upland habitat should benefit this species, as females in this genus require native emergent vegetation for successful reproduction and spend much of their time in upland habitats away from the breeding pond (Gibbons *et al.* 2002, White *et al.* 2010).

Further inventory is needed to define the extent of populations of Blackwater Bluets in New York, and additional survey work in streams, rivers, and coastal plain ponds on Long Island could reveal new populations. In addition, research is required to understand the habitat requirements of this species, and to create appropriate management guidelines for its persistence in known locations (NYS DEC 2006).

Action Category	Action	Description
C.7 Legislative and Regulatory Framework or Tools	C.7.1.3.0 Create, amend, or influence regulation	
C.7 Legislative and Regulatory Framework or Tools	C.7.2.1.0 Create or amend policies	

Table 3. Recommended conservation actions for *Enallagma weewa.*

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for odonates of rivers and streams.

Habitat monitoring:

____ Support and encourage habitat monitoring efforts that would complete the baseline assessment of habitat quality and threats.

Habitat research:

____ Support and encourage research projects that will help define preferred habitat in order to guide future monitoring, restoration and habitat protection efforts.

New regulation:

____ Recommendations for official state endangered, threatened, and special concern listing are an anticipated result of the statewide inventory. It is expected that at least a few species will be recommended for listing and officially adding these species to the list would constitute a concrete action. Four of the species are currently listed as Special Concern, but it is possible a change in their listing status may be warranted following additional surveys.

Population monitoring:

____ Conduct surveys to obtain repeatable, relative abundance estimates for these species at known sites and newly discovered sites where access permission to conduct surveys is obtained (as indicated in the State Wildlife Grant Odonate Inventory Project).

Statewide baseline survey:

____ Most of these species are known from fewer than 10 locations in the state, but new populations undoubtedly remain to be discovered. A currently approved, but not yet begun State Wildlife Grant Statewide Odonate Inventory Project will utilize volunteers, Natural Heritage Program and other staff to conduct surveys for these species at potential sites throughout the state.

VII. References

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Originally prepared by	Erin White
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