

Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



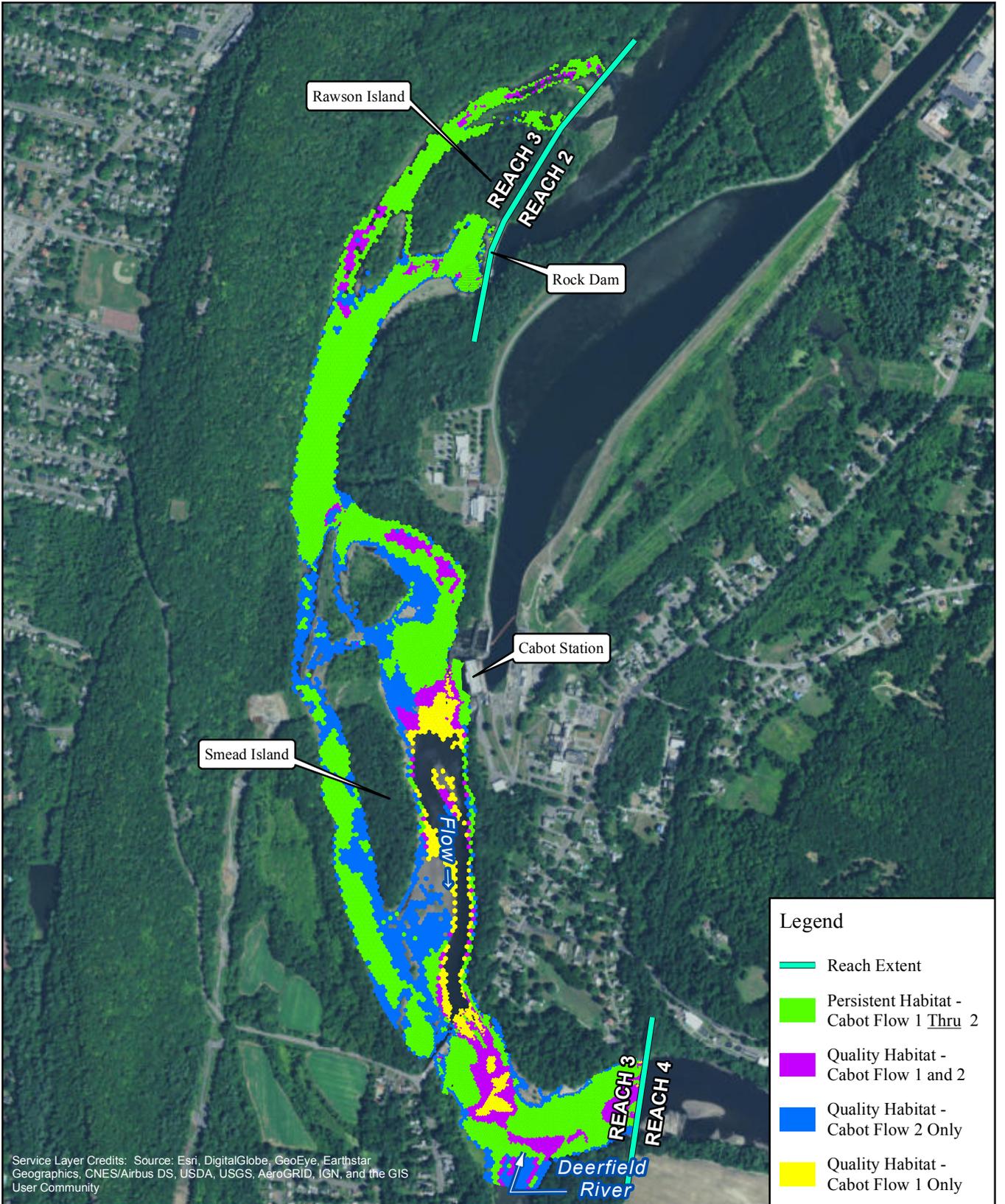
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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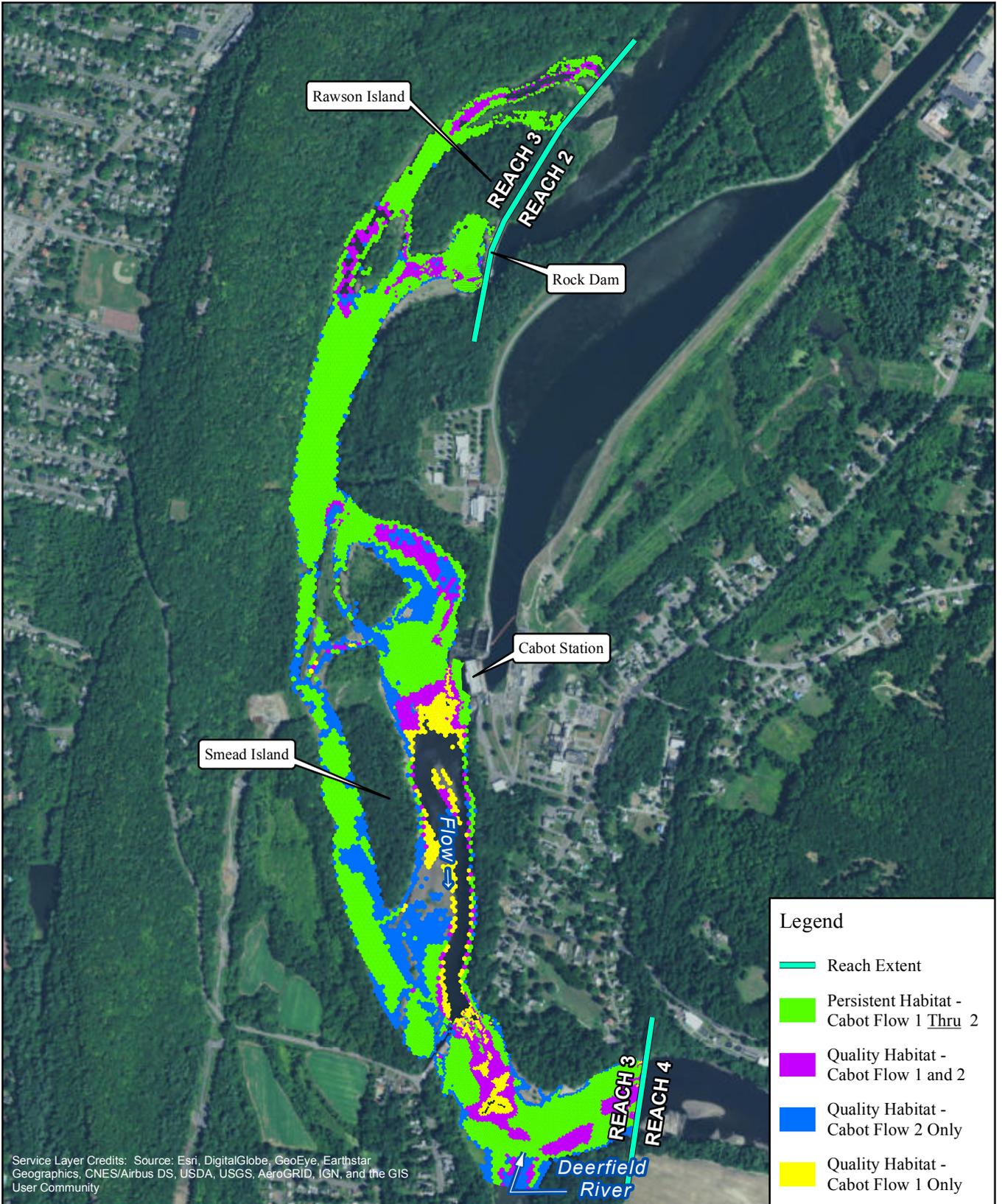
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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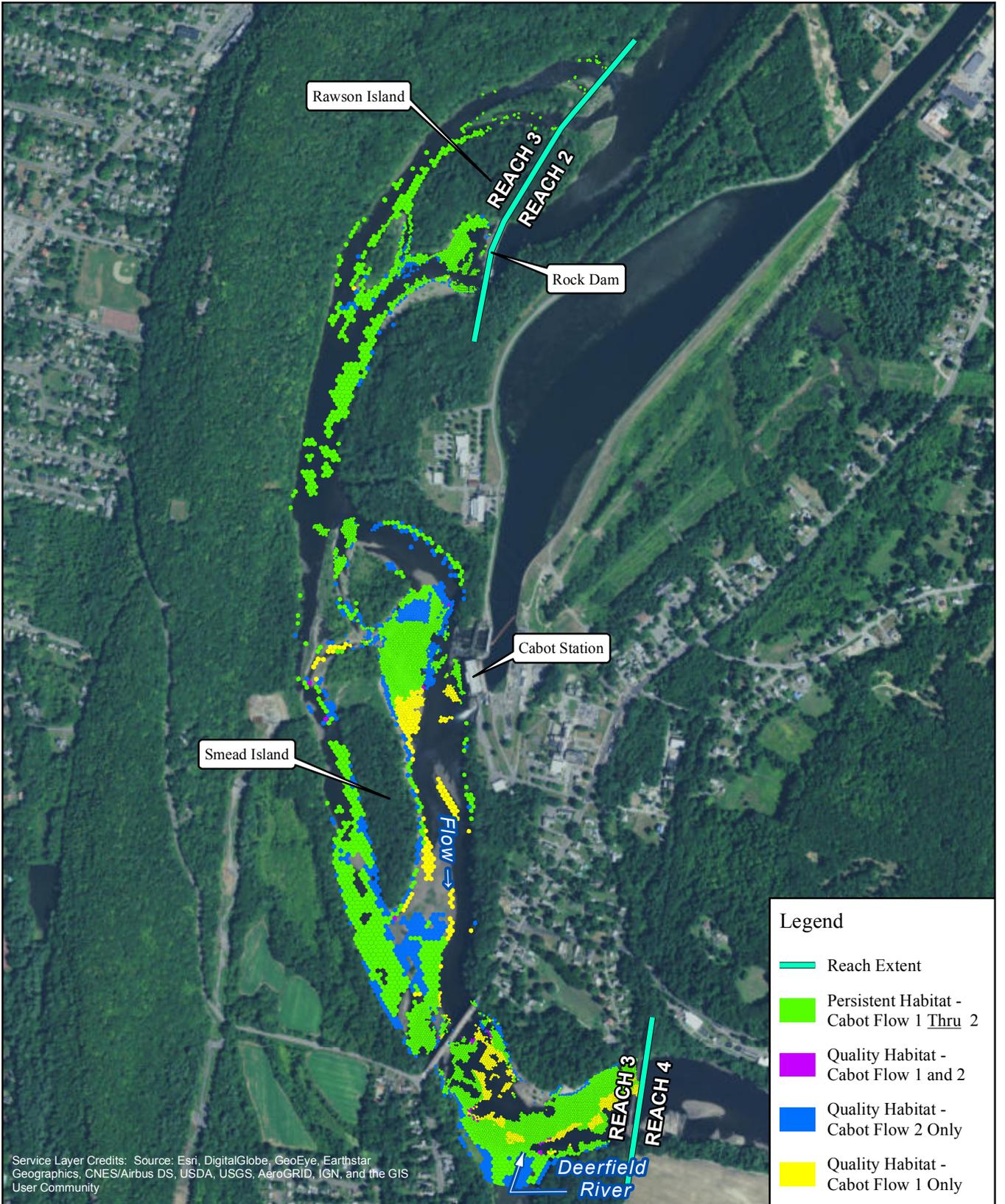
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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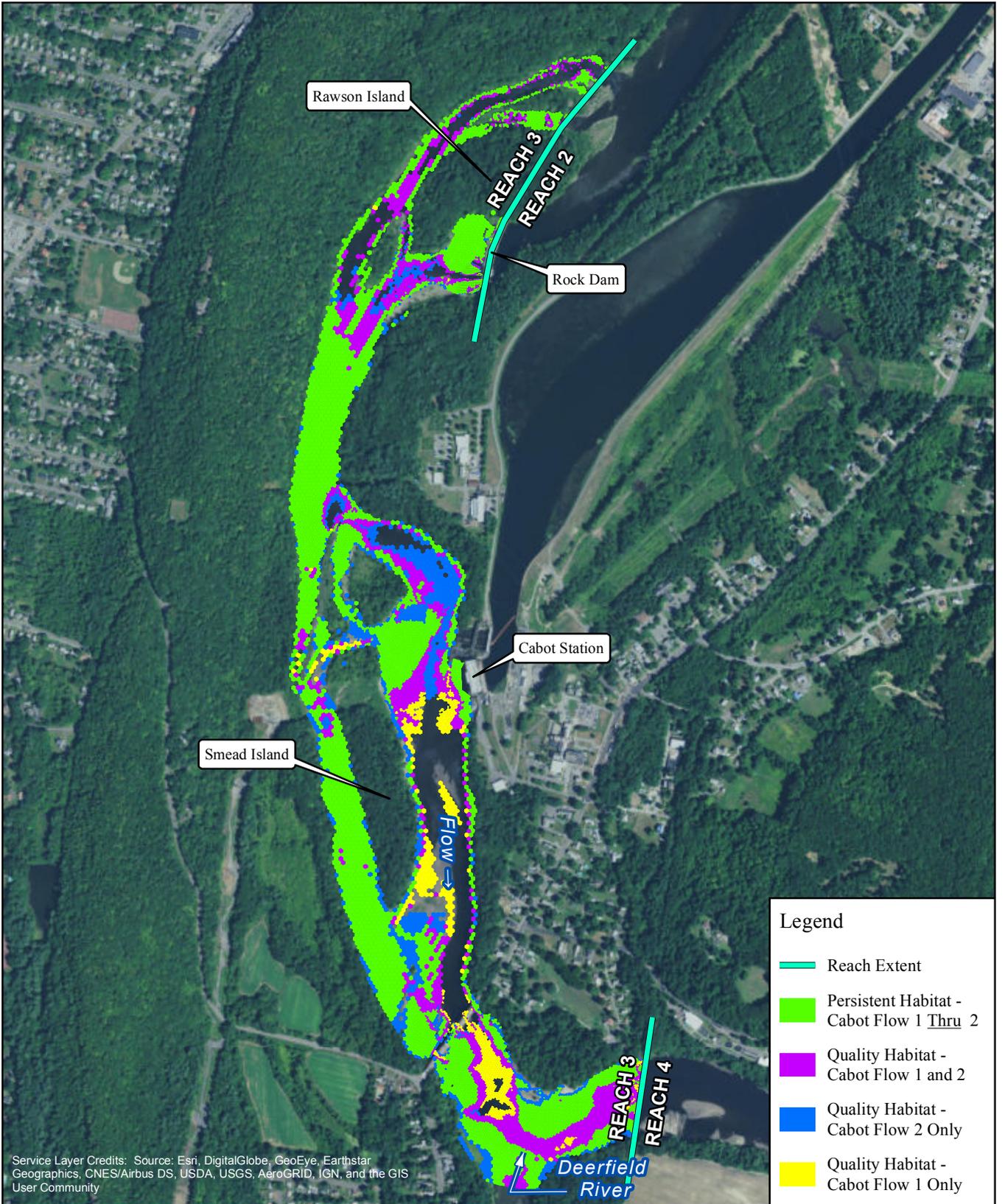
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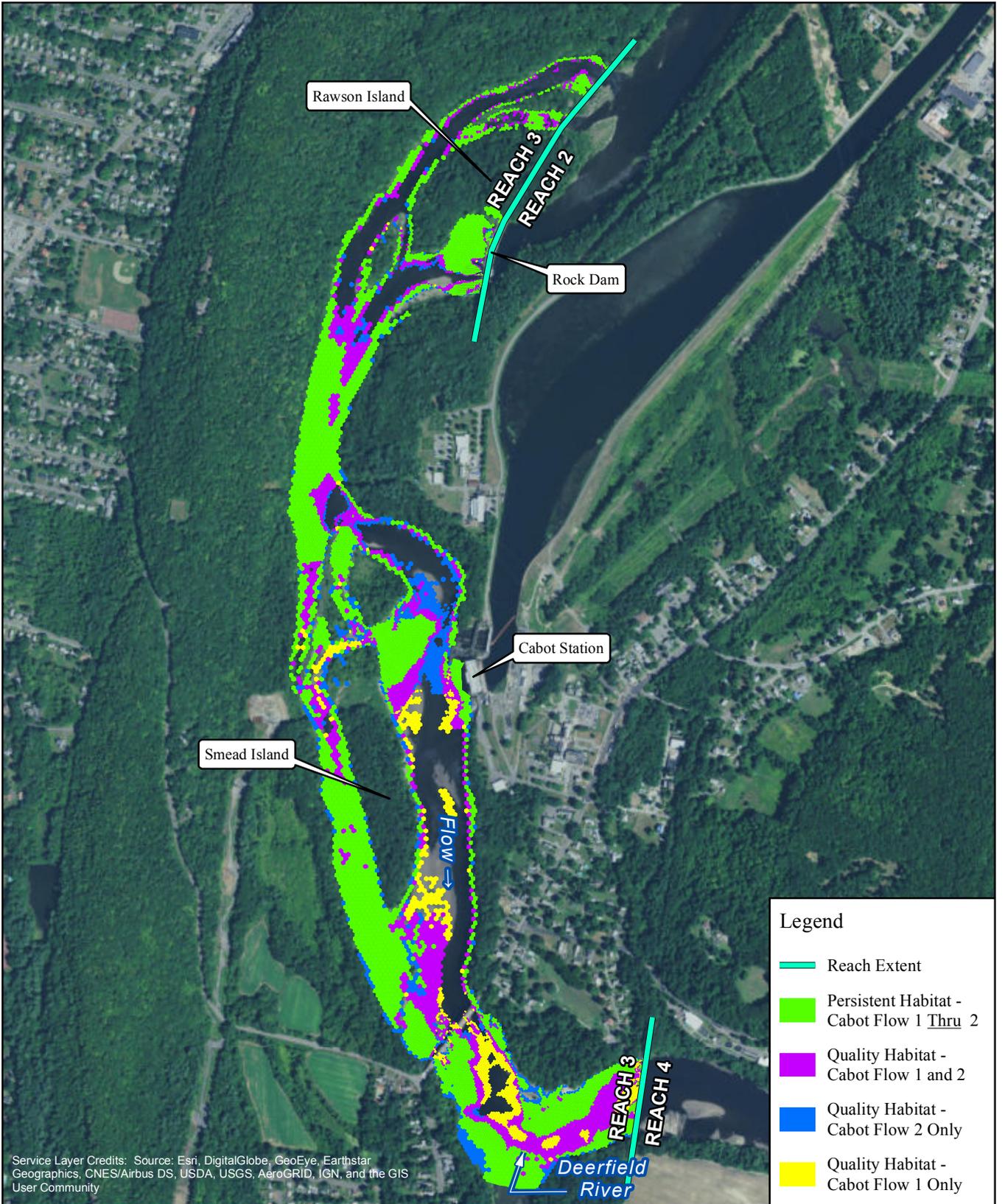
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Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 3000 cfs
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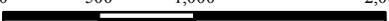
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RELICENSING STUDY 3.3.1

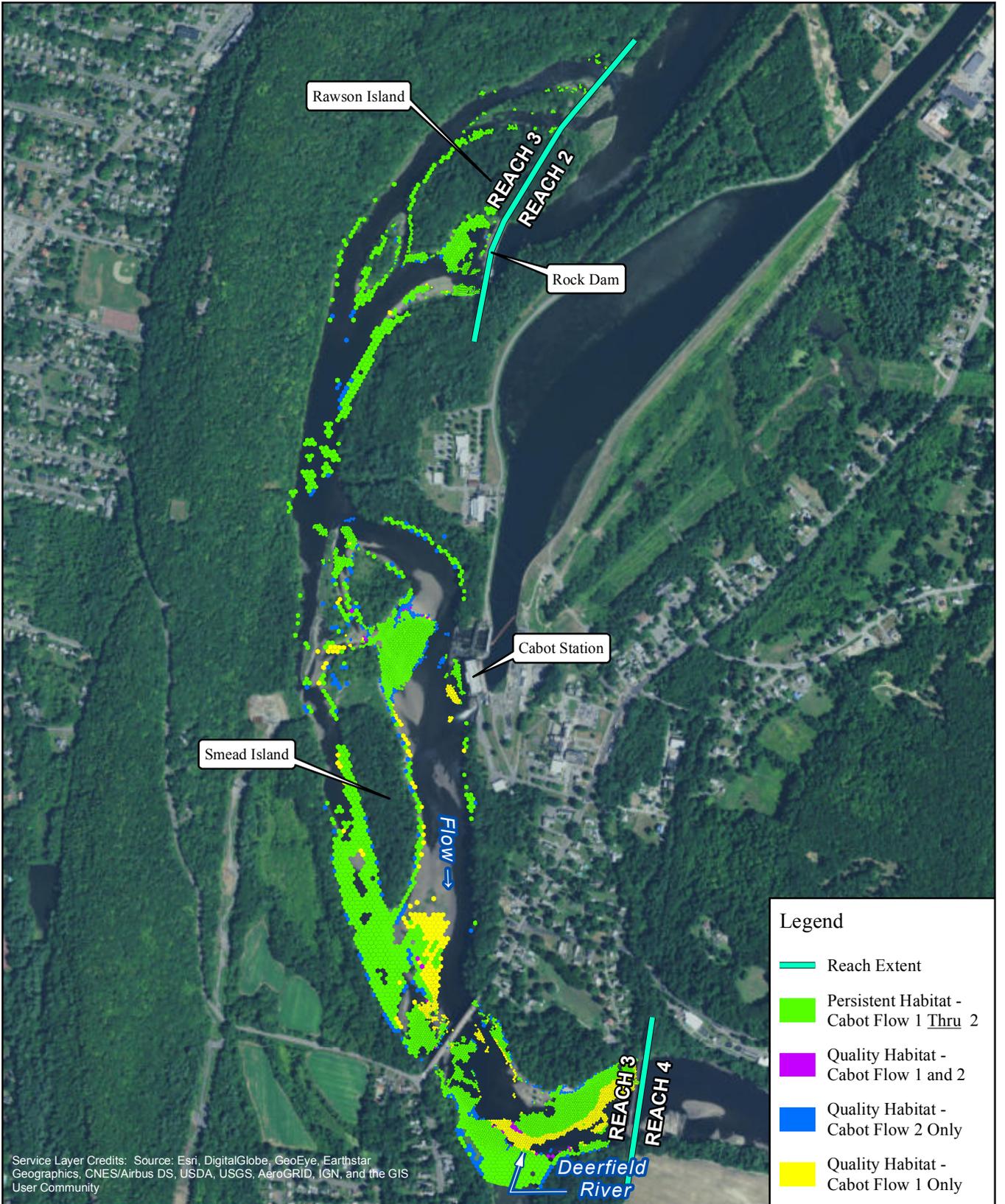
Persistent Habitat
Yellow Lampmussel-Juvenile

Bypass Flow:	5000 cfs
Cabot Flow 1:	2500 cfs
Cabot Flow 2:	7000 cfs

0 500 1,000 2,000 Feet



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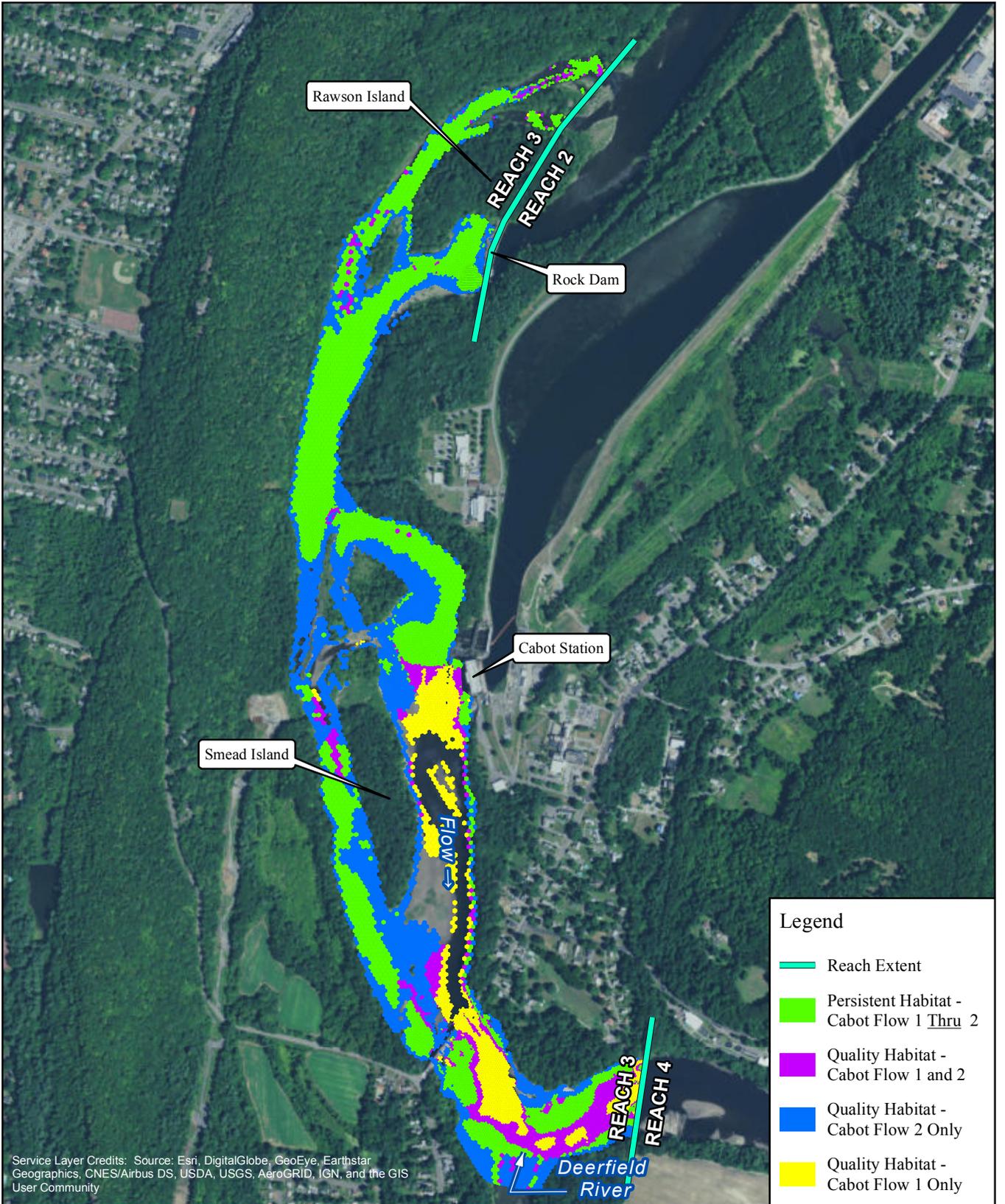
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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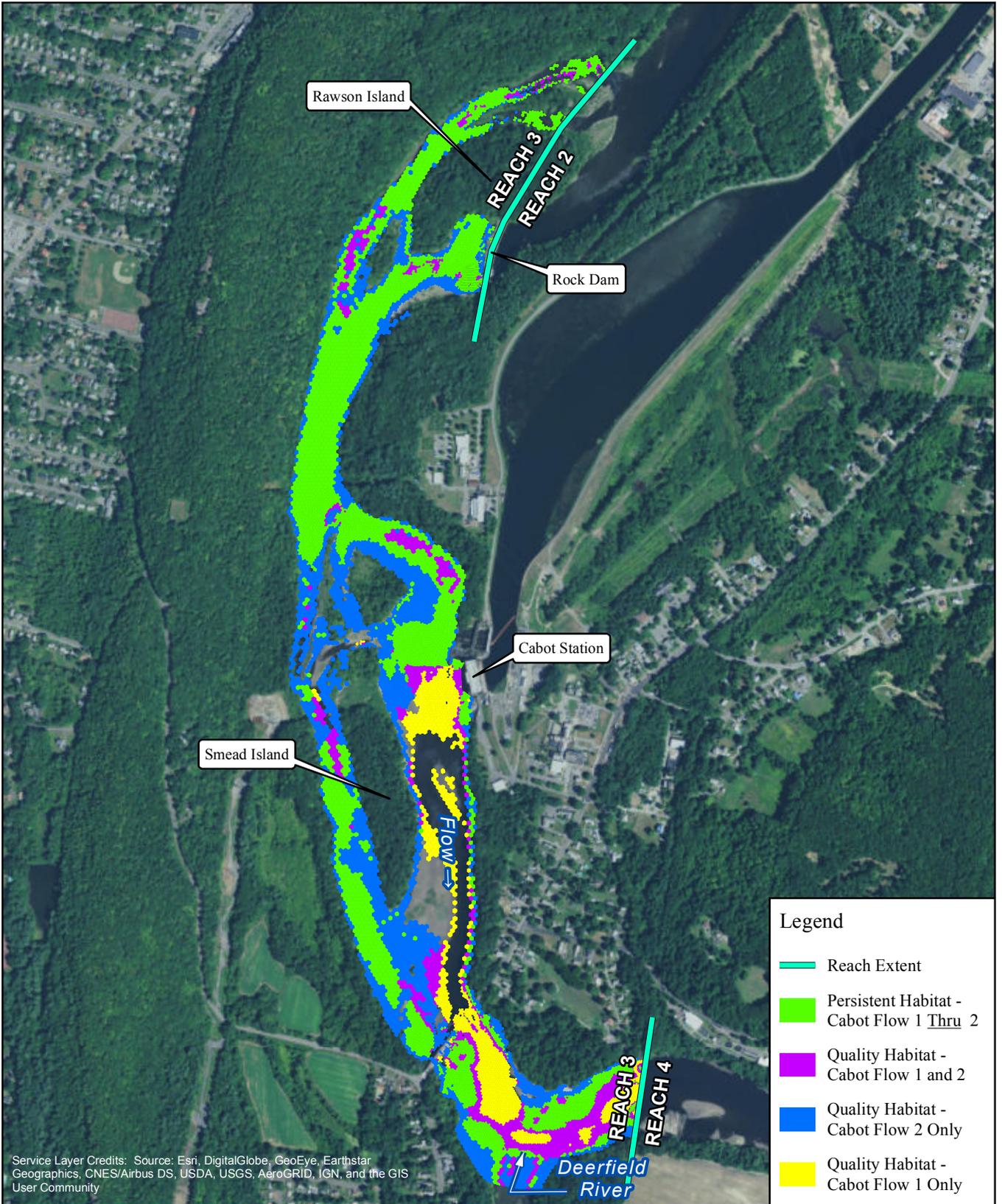
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Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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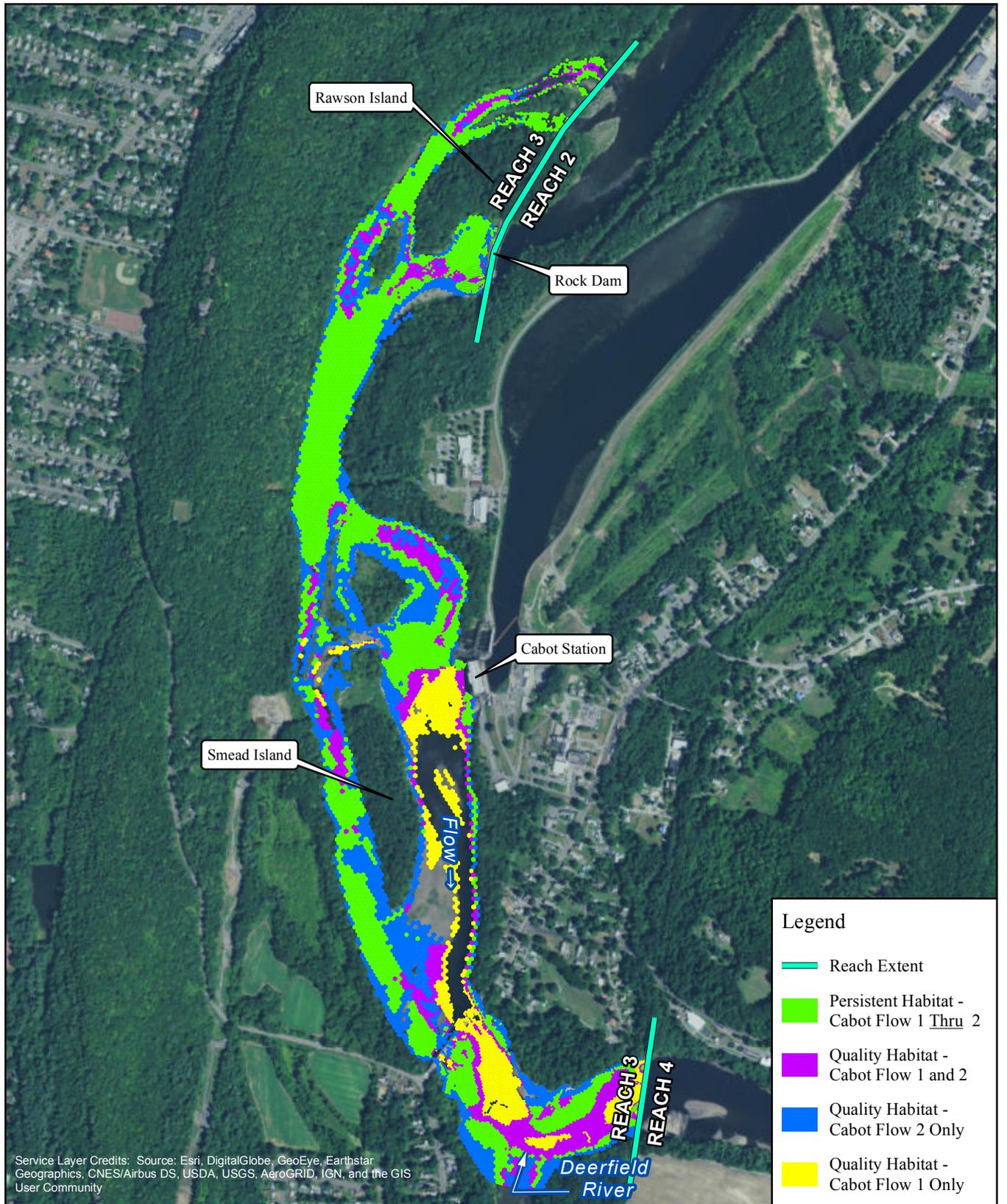
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Persistent Habitat
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 Bypass Flow: 500 cfs
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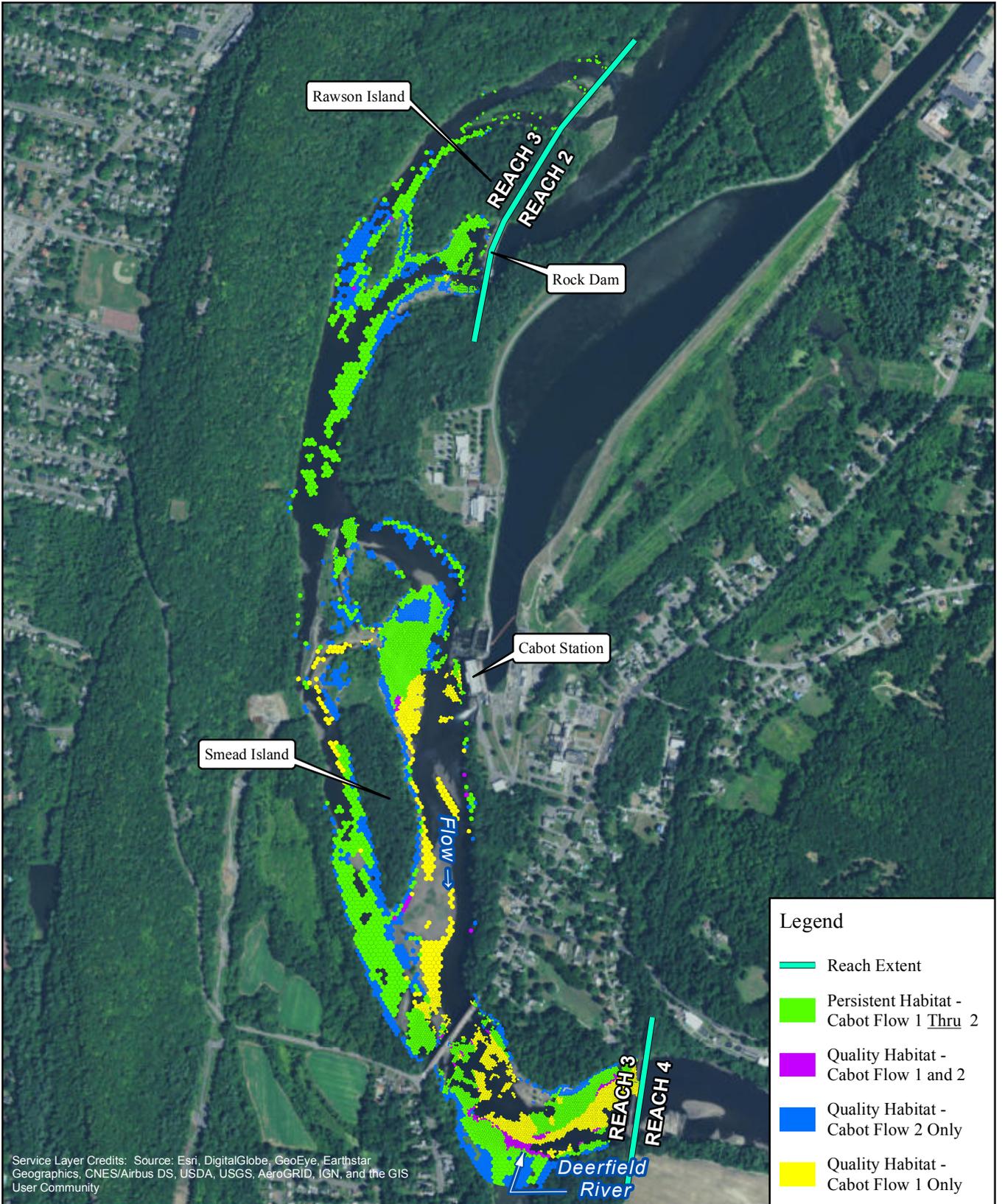


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Persistent Habitat
 Yellow Lampmussel-Juvenile
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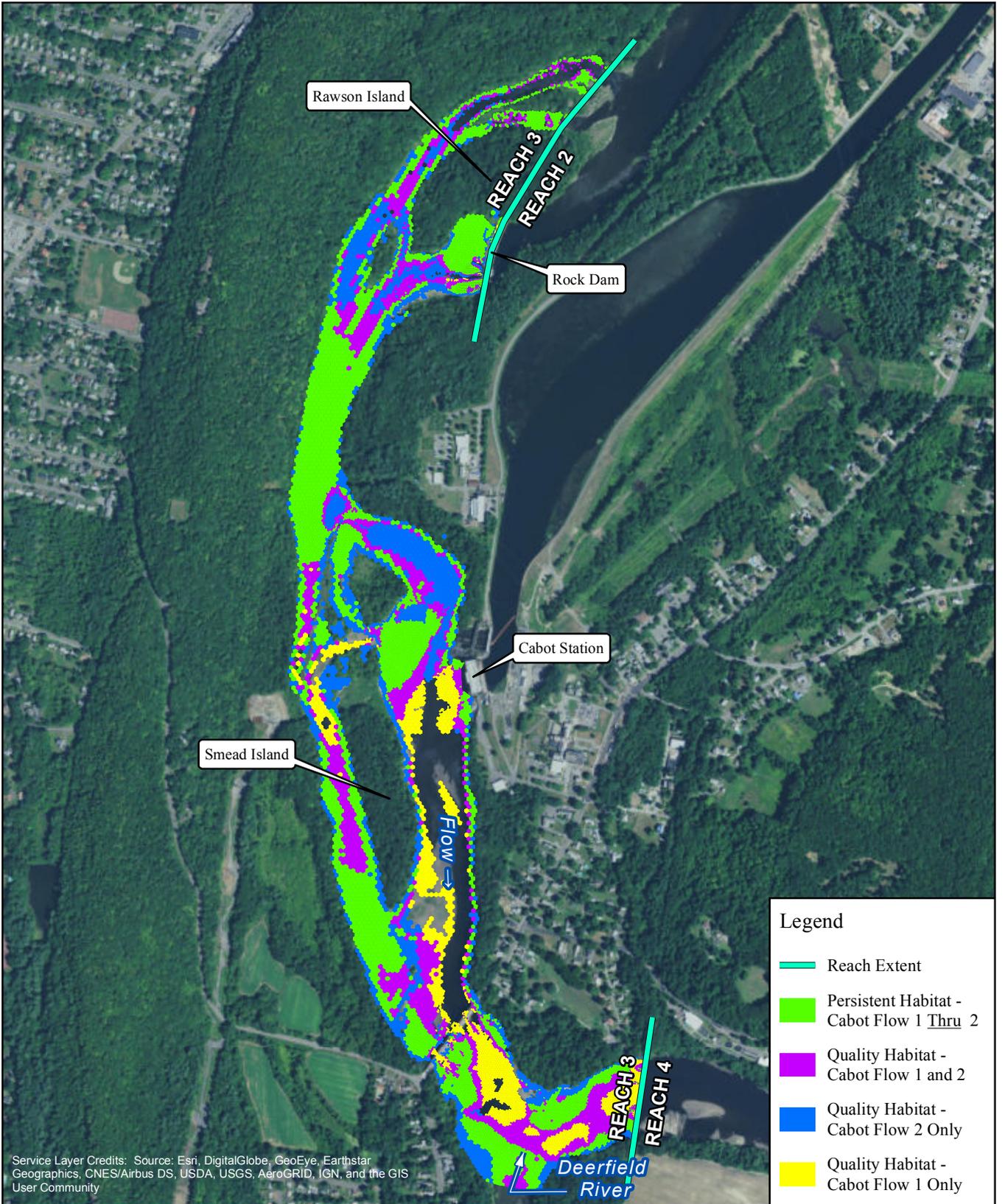
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Northfield Mountain Pumped Storage Project No. 2485
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RELICENSING STUDY 3.3.1

Persistent Habitat
Yellow Lampmussel-Juvenile
Bypass Flow: 2000 cfs
Cabot Flow 1: 2500 cfs
Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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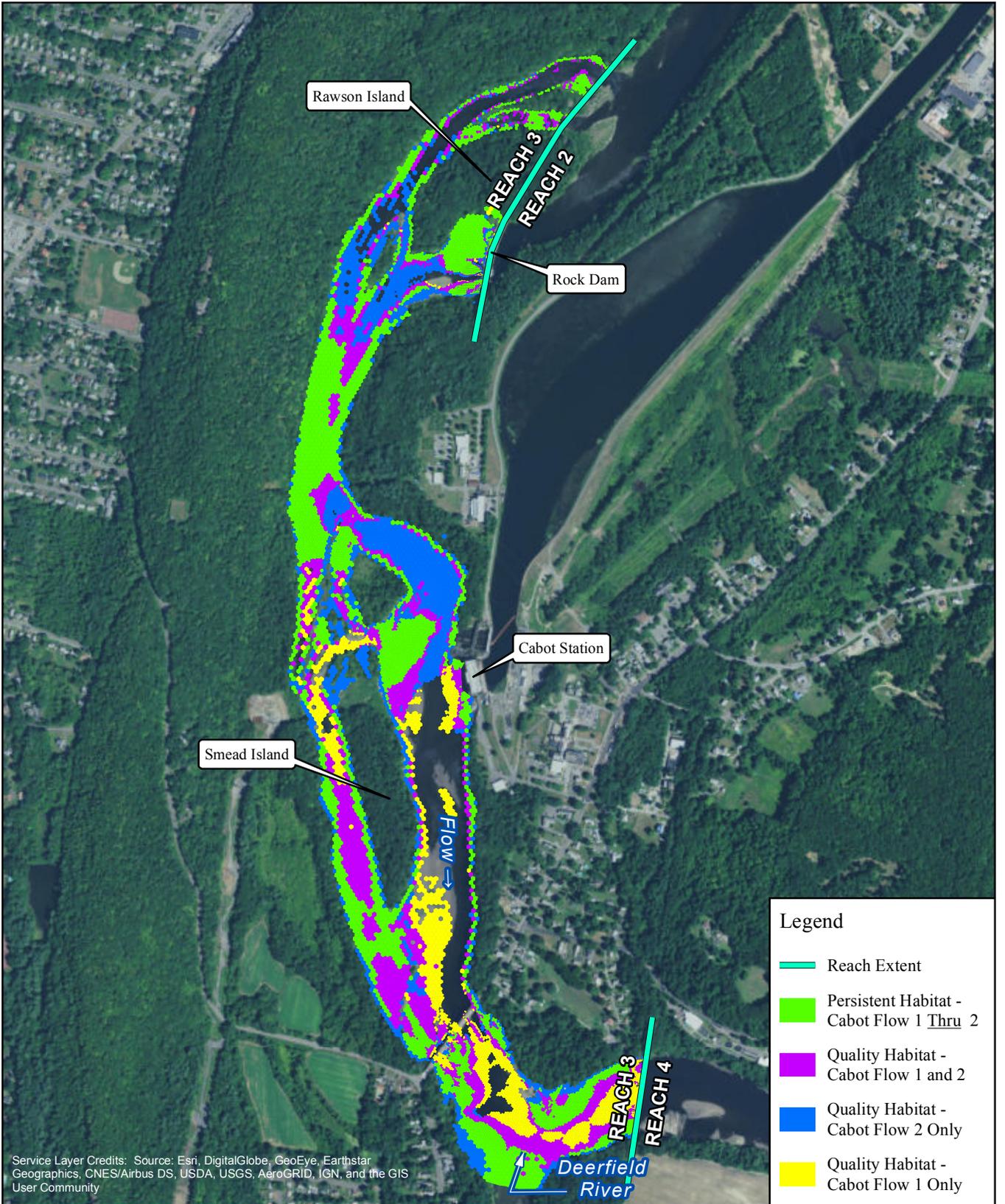
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Persistent Habitat
 Yellow Lampmussel-Juvenile
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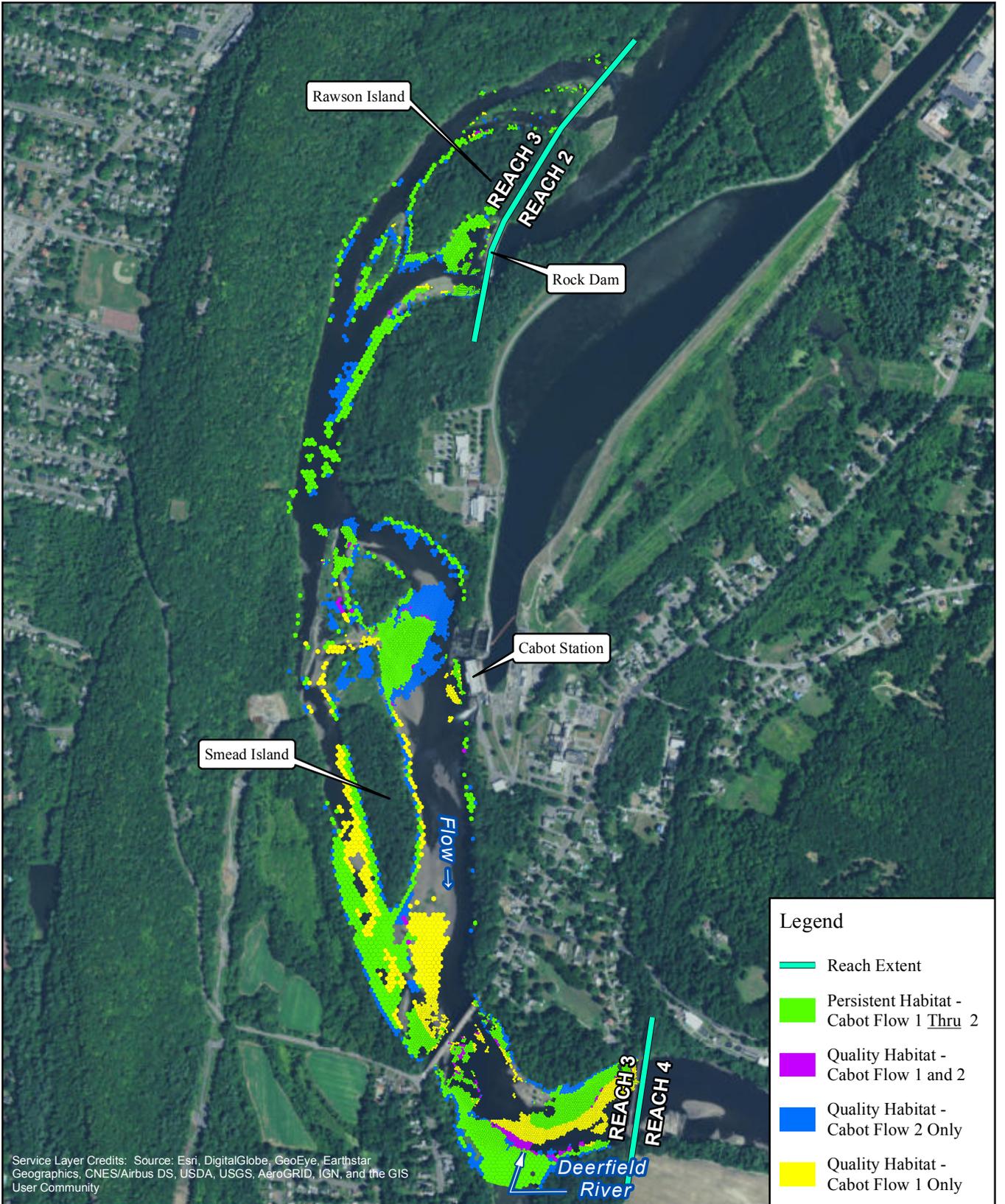
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0 500 1,000 2,000 Feet

Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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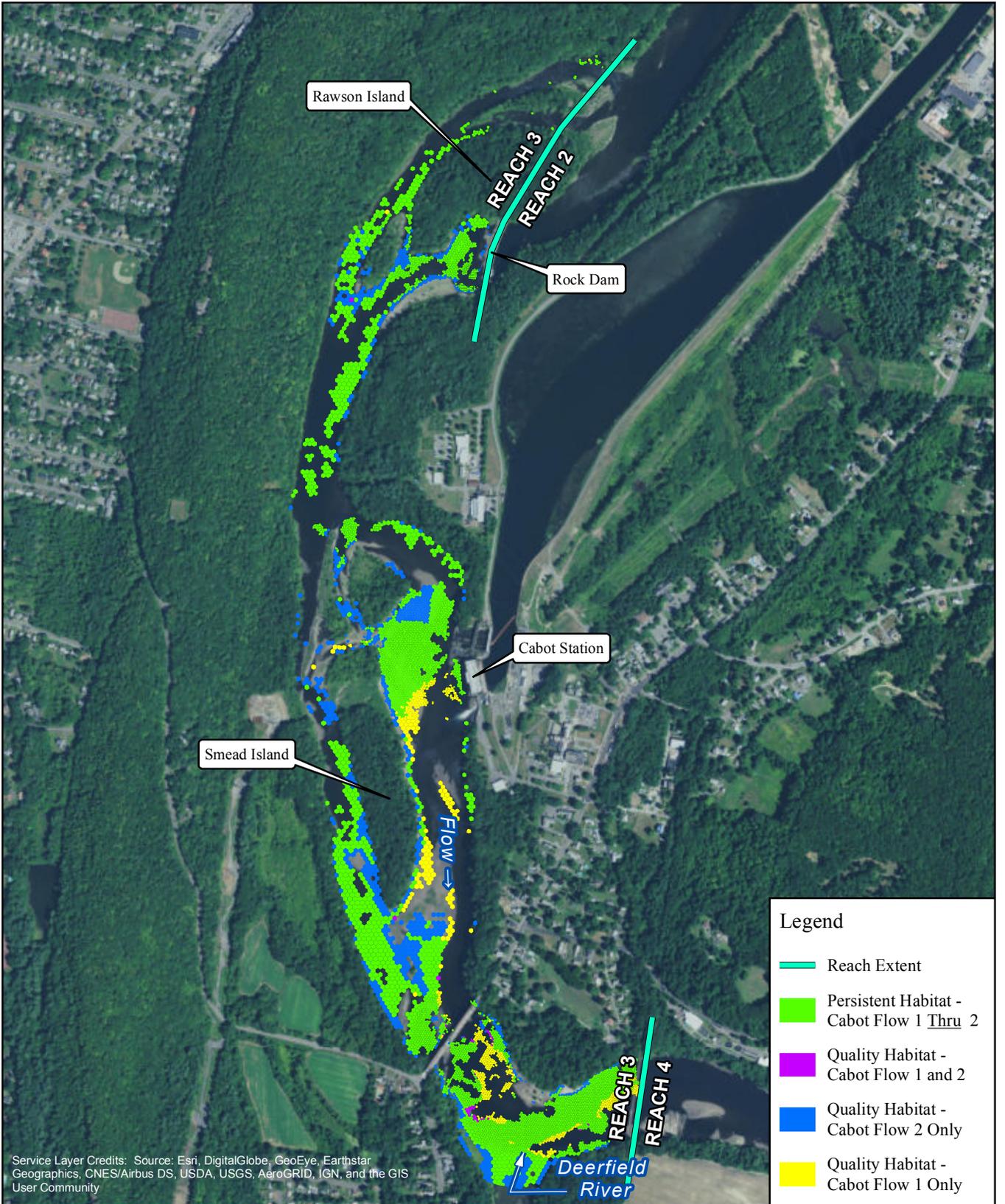
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RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 6500 cfs
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 Cabot Flow 2: 14000 cfs

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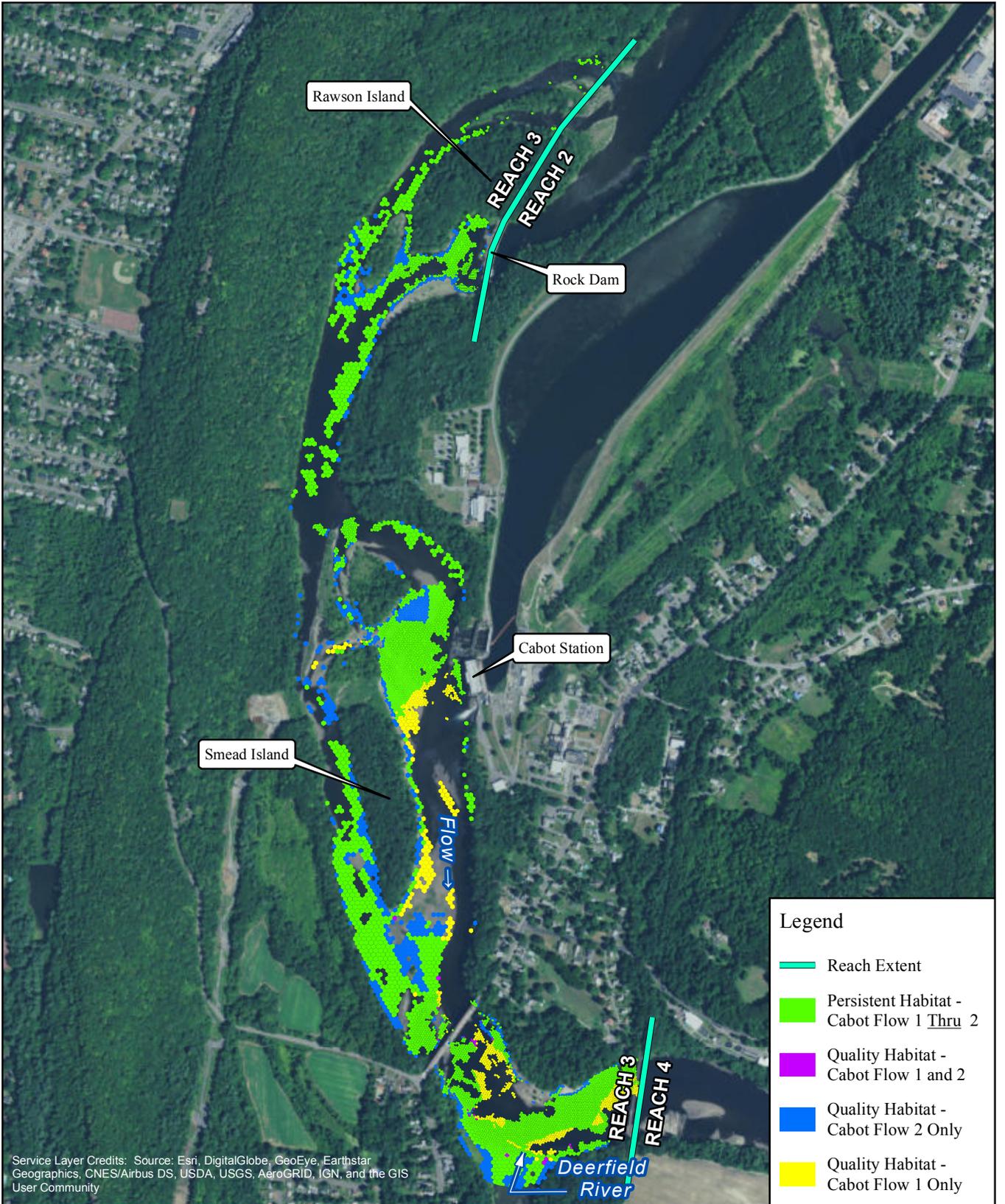
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 Turners Falls Hydroelectric Project No. 1889

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Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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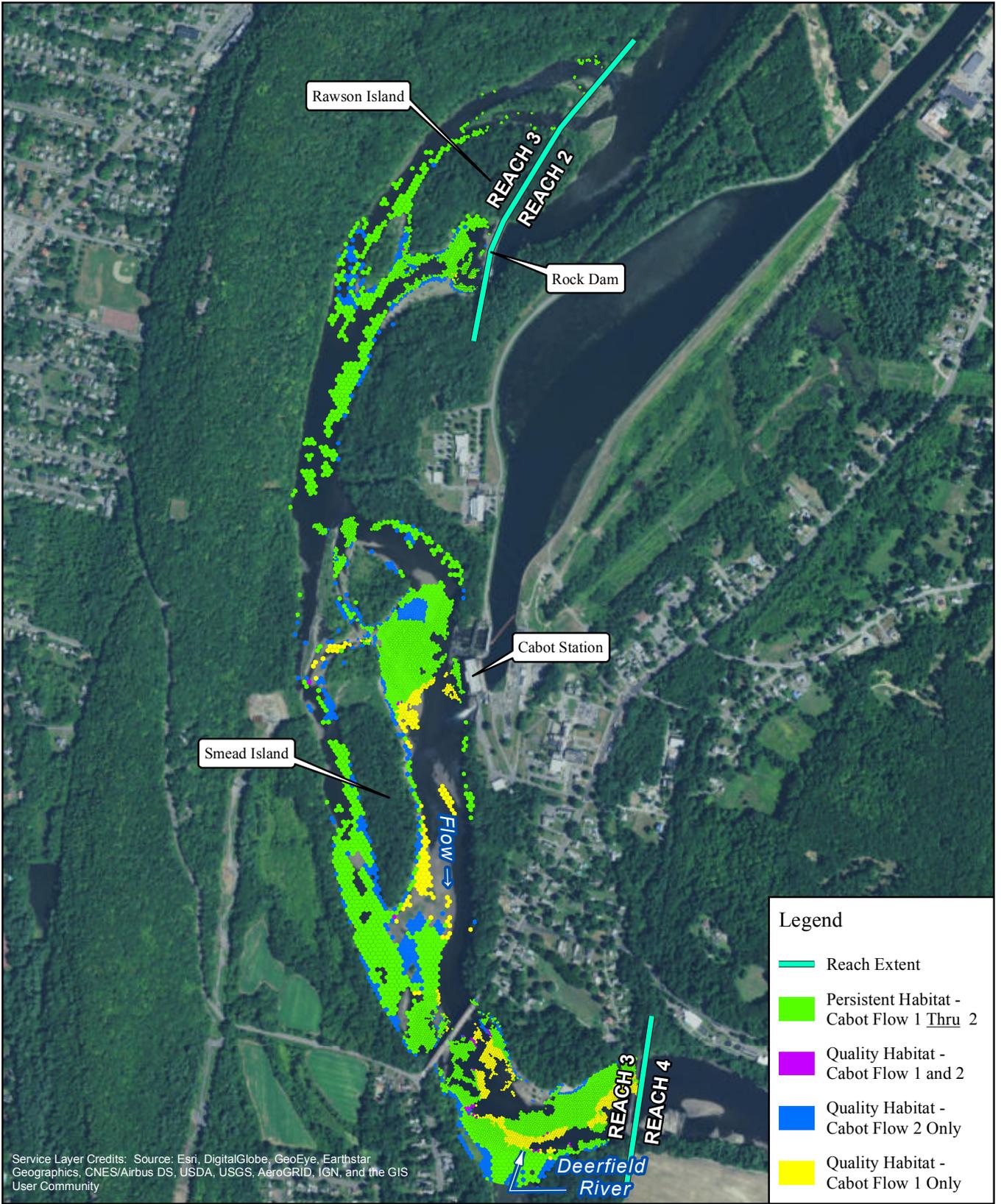
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Persistent Habitat
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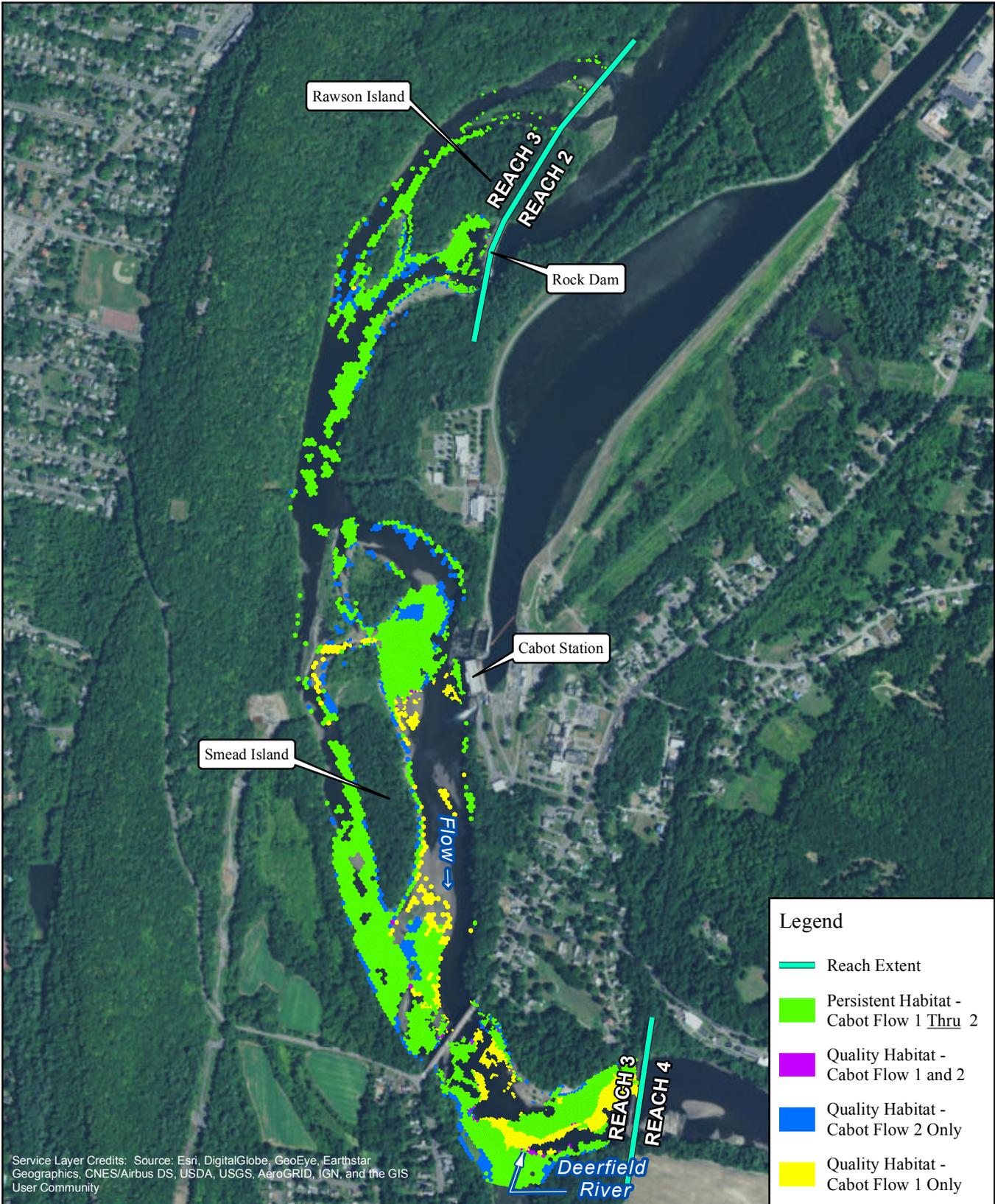
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RELICENSING STUDY 3.3.1

Persistent Habitat
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Bypass Flow: 1000 cfs
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Cabot Flow 2: 9000 cfs

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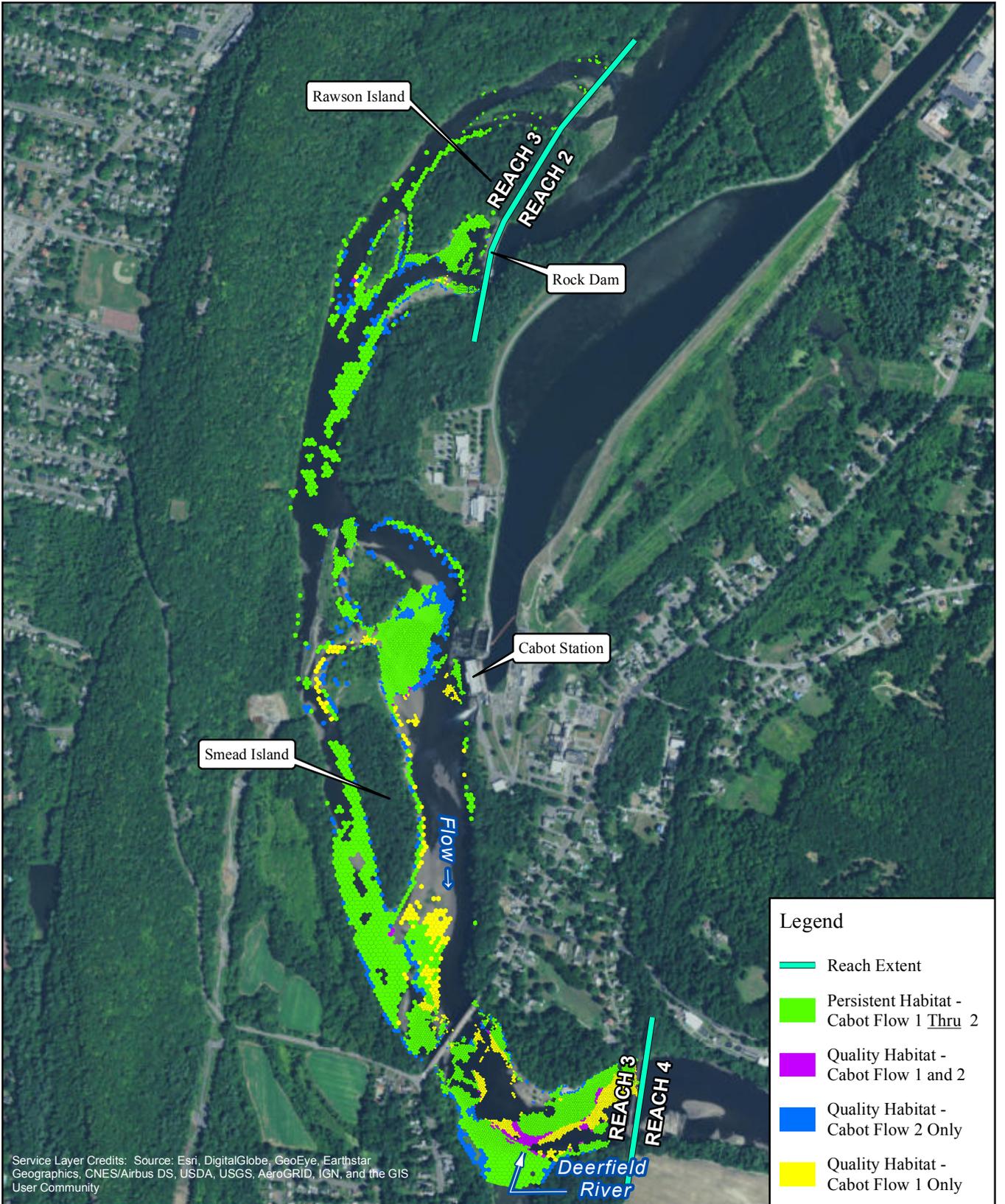
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0 500 1,000 2,000 Feet

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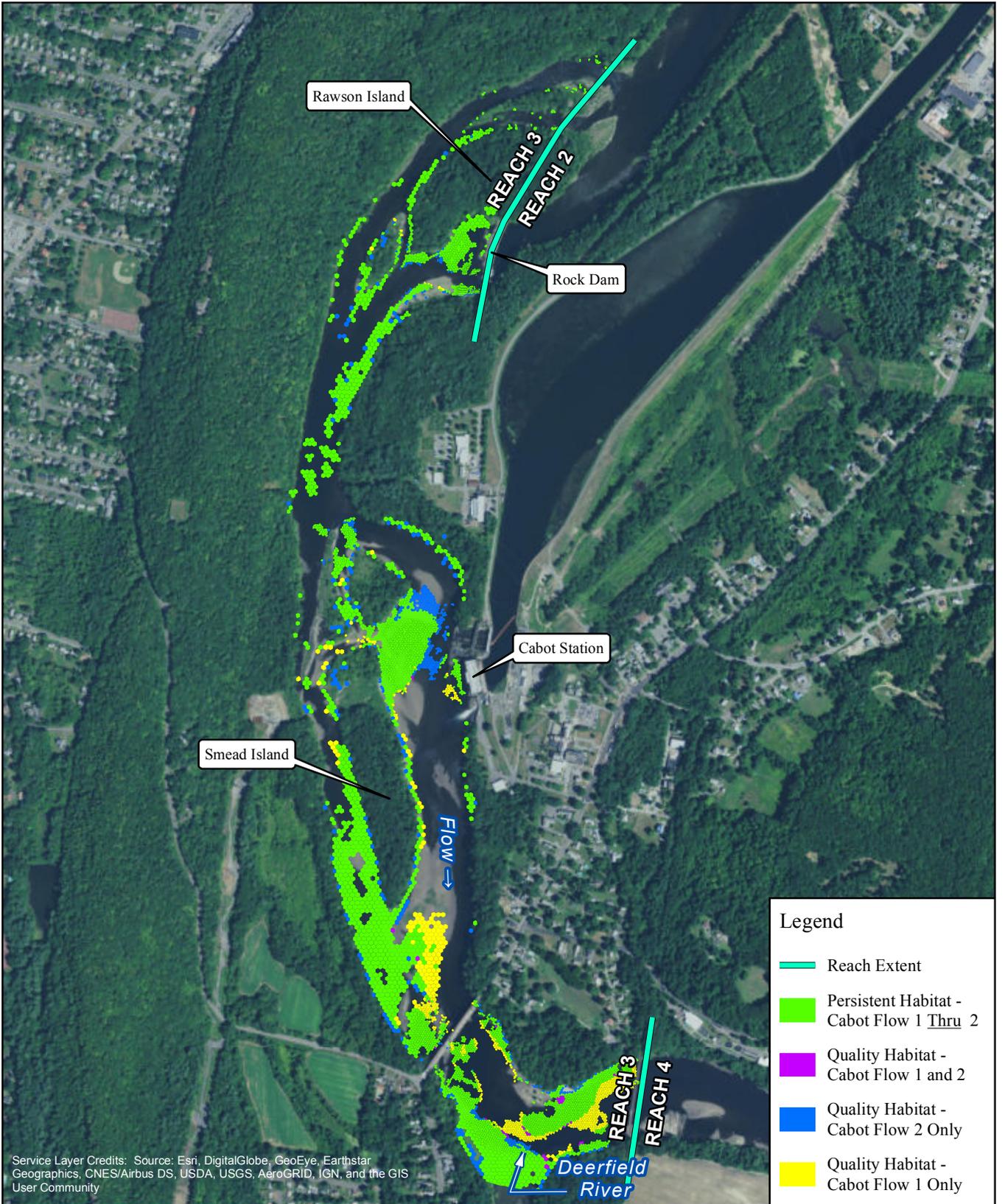
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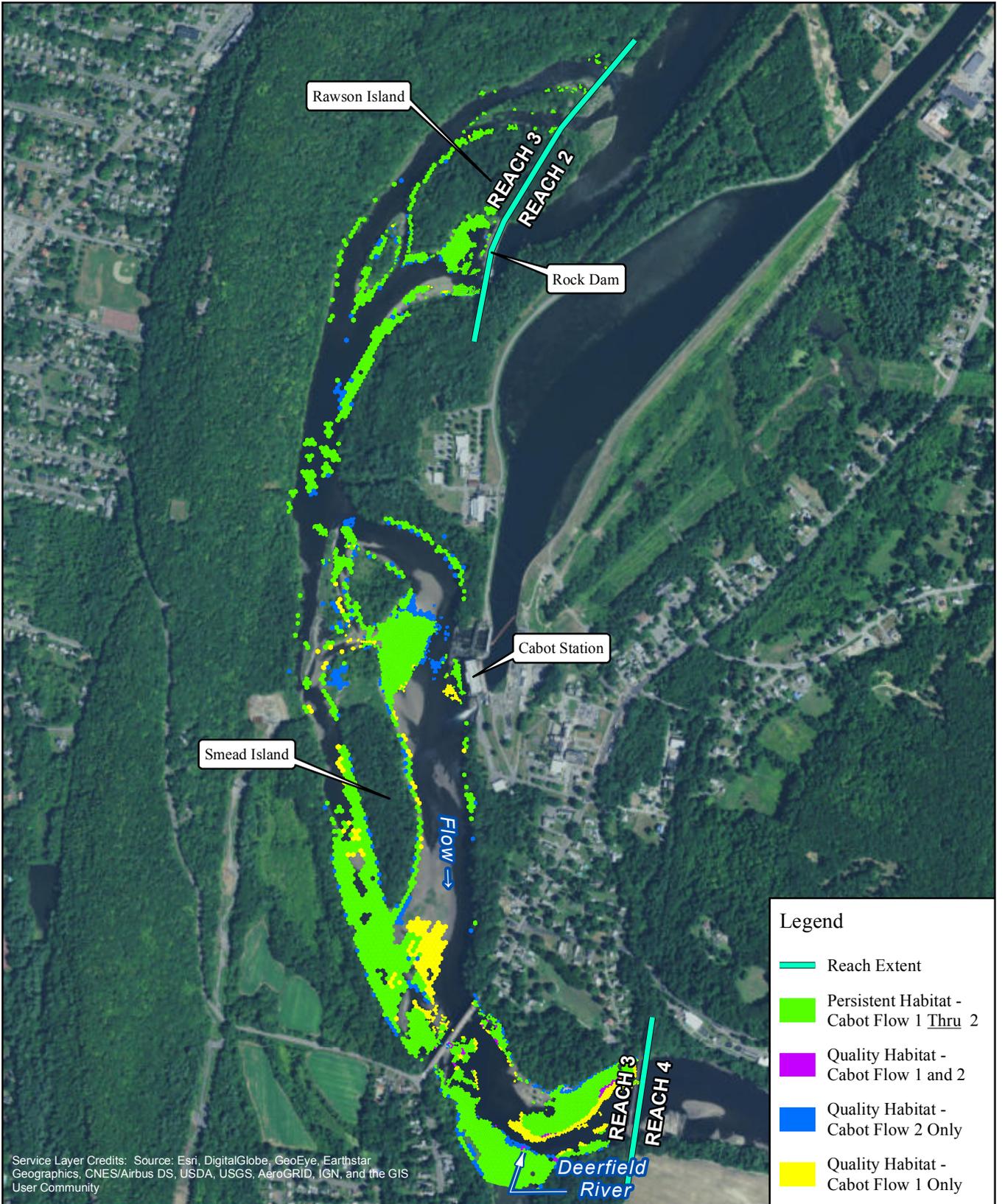
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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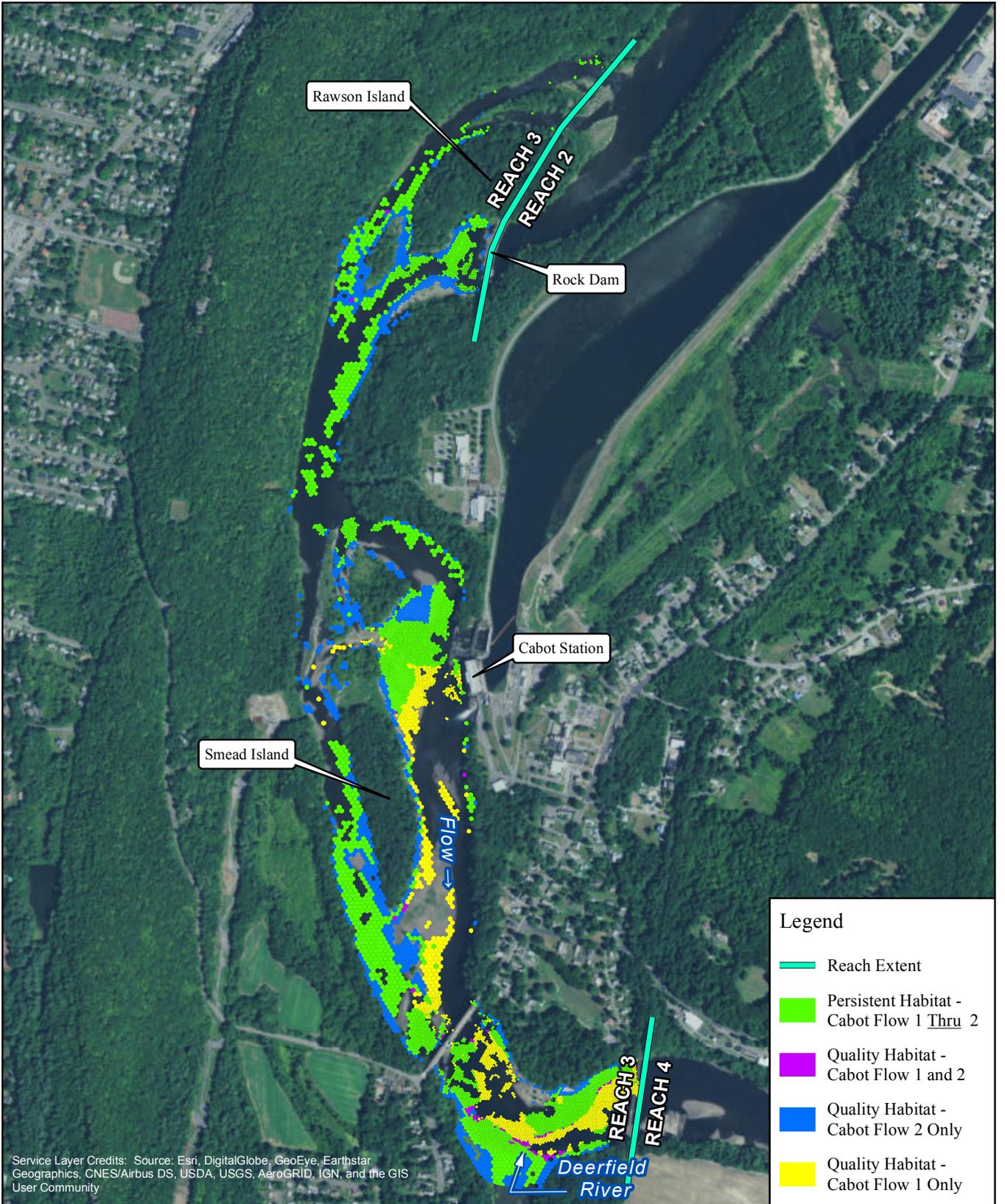
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Persistent Habitat
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 Bypass Flow: 6500 cfs
 Cabot Flow 1: 4500 cfs
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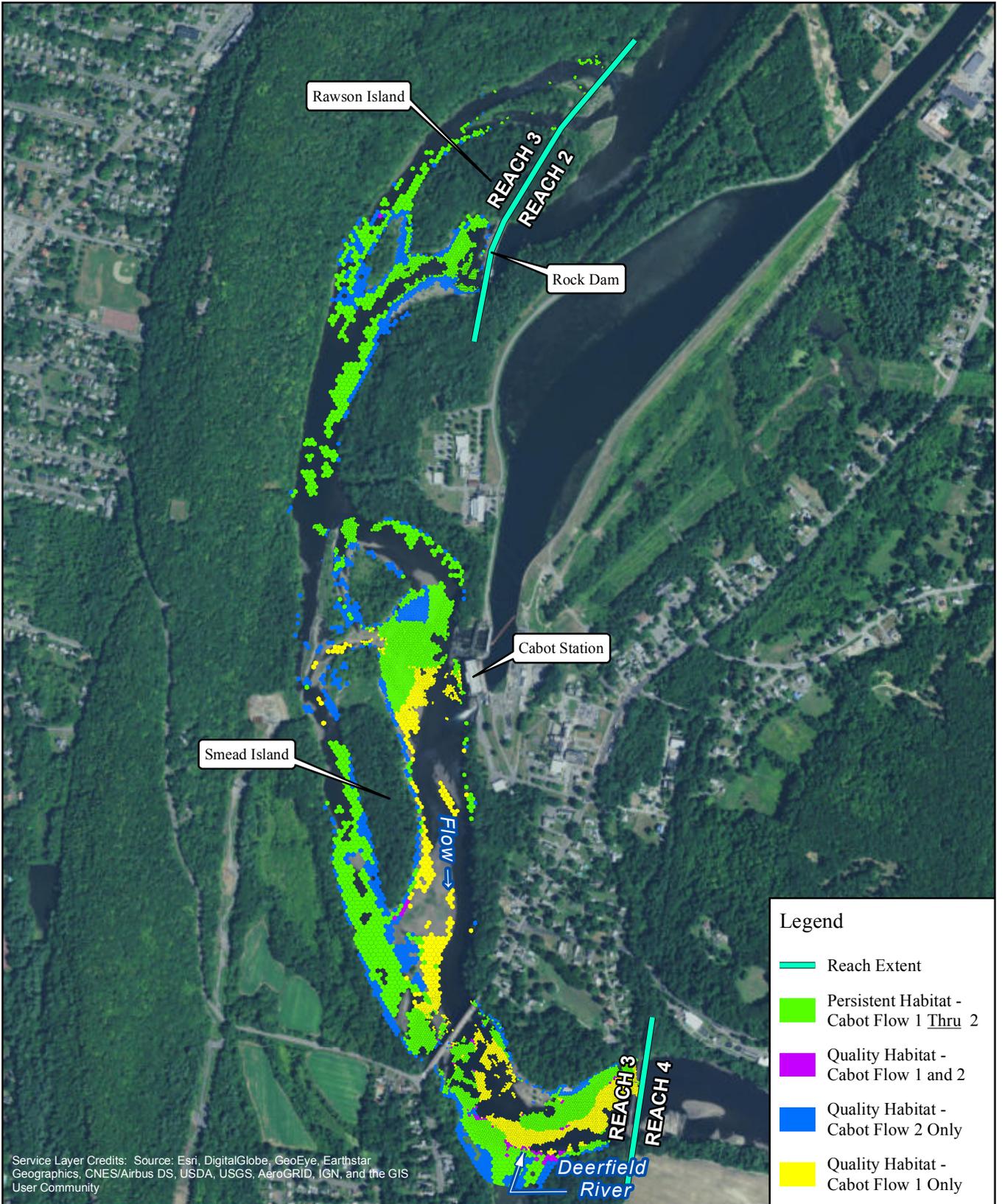
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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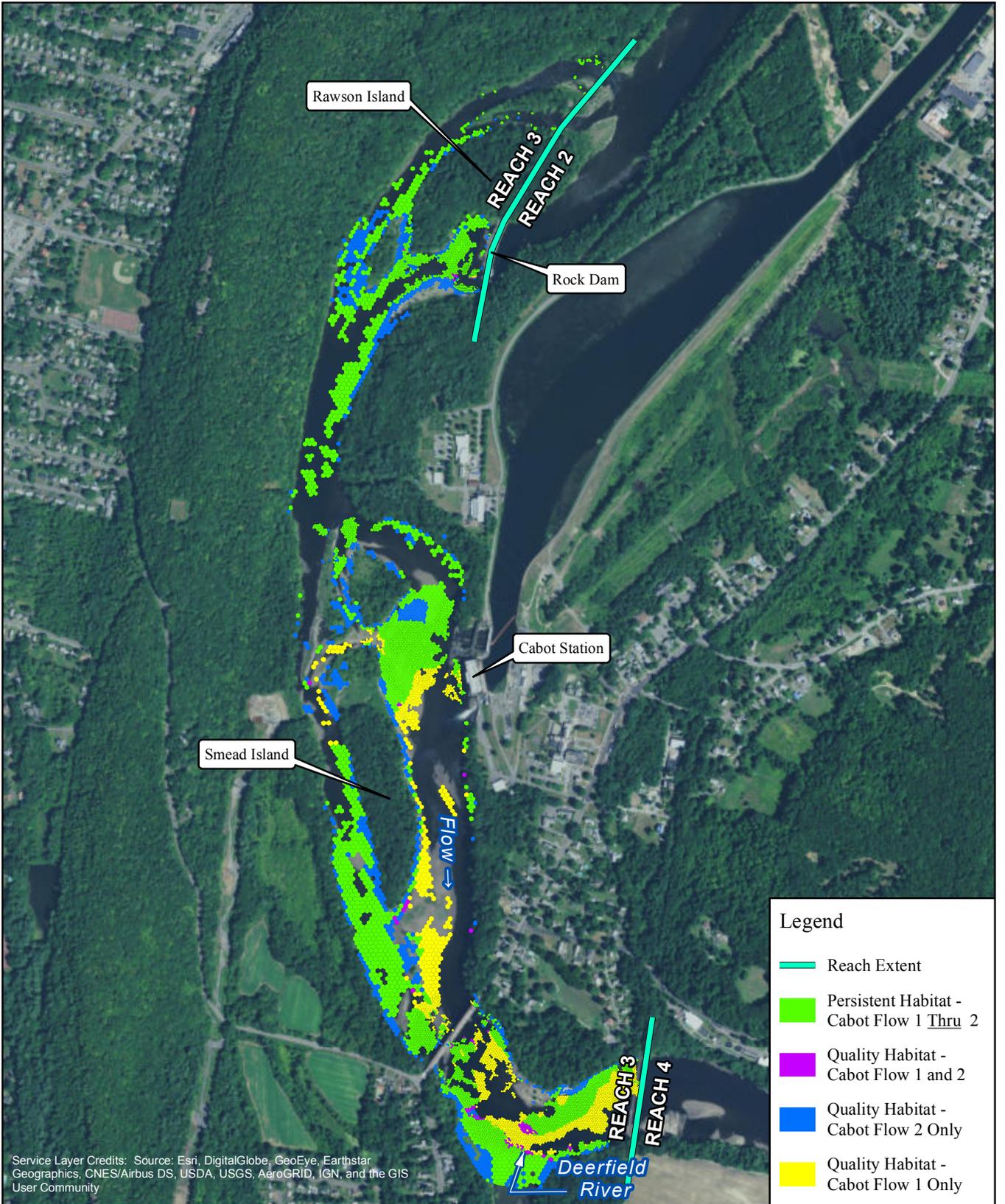
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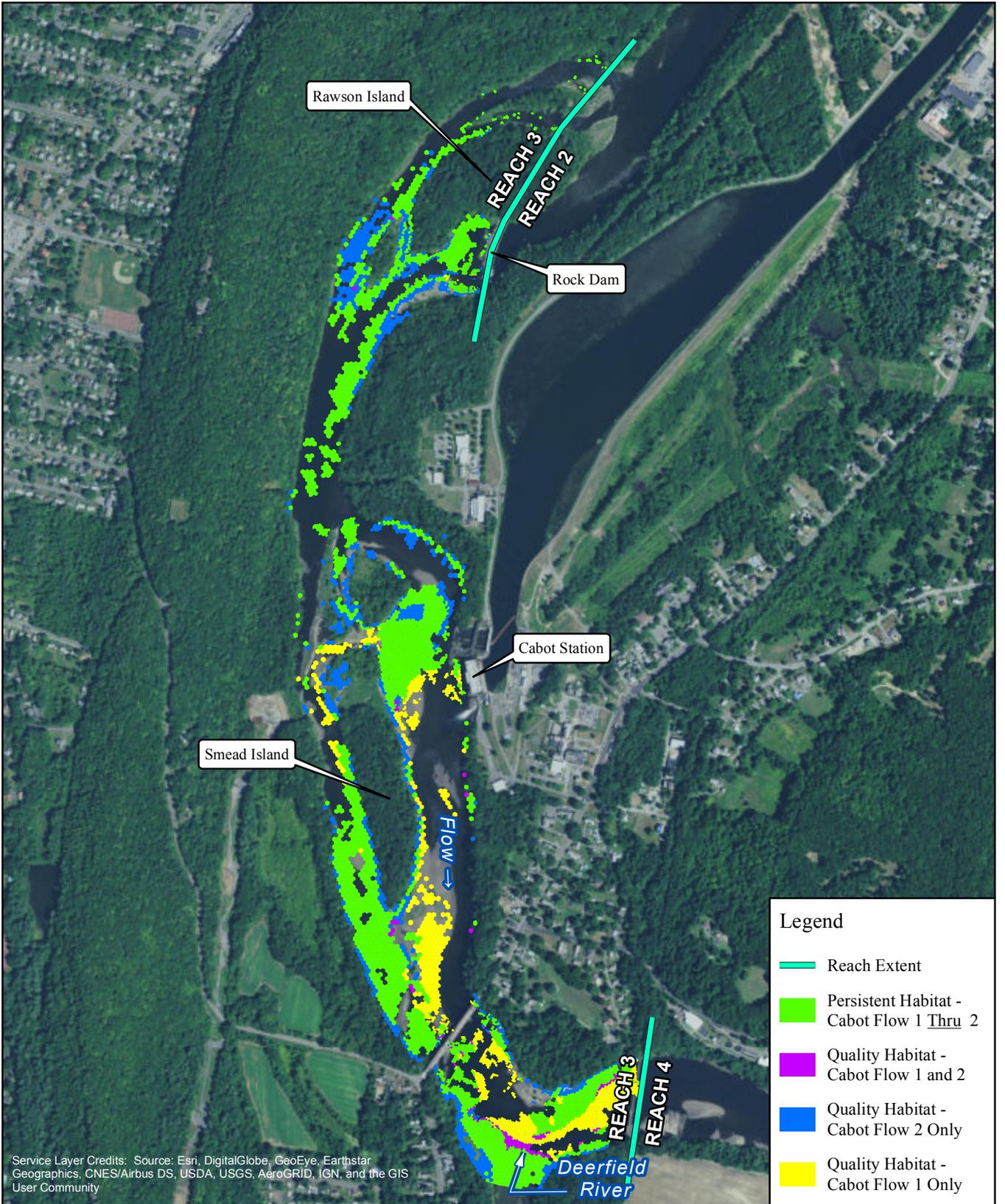
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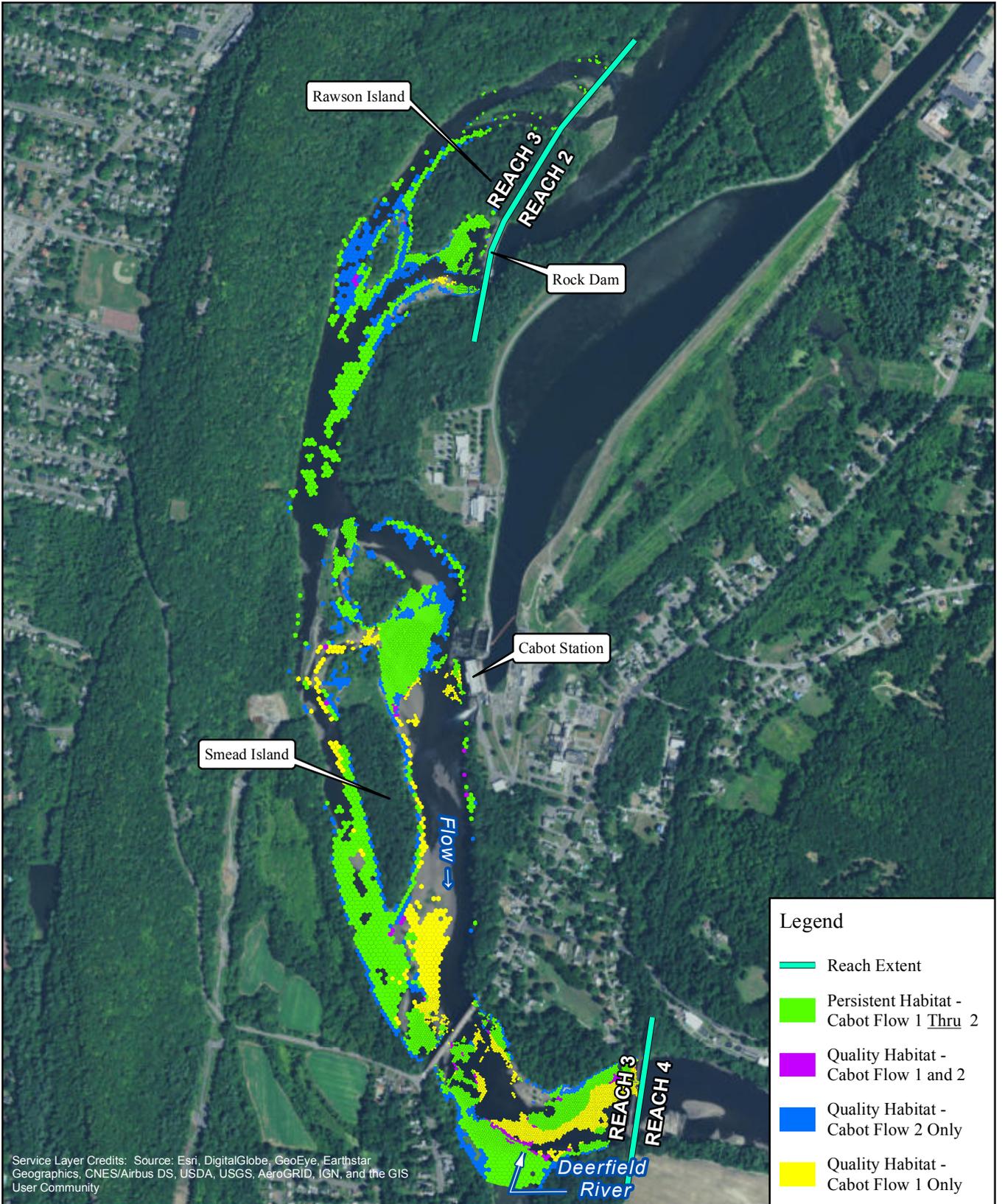
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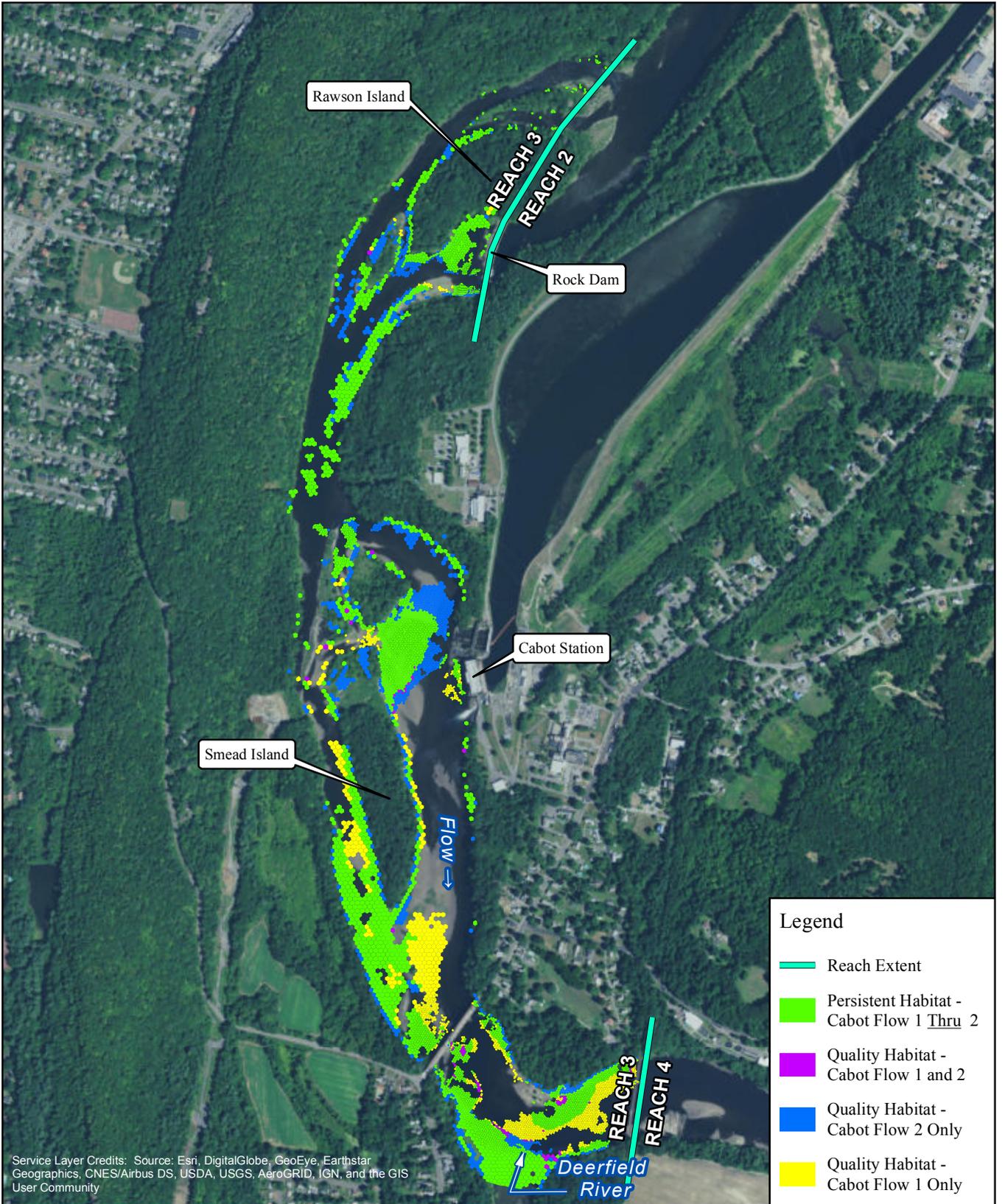
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Persistent Habitat
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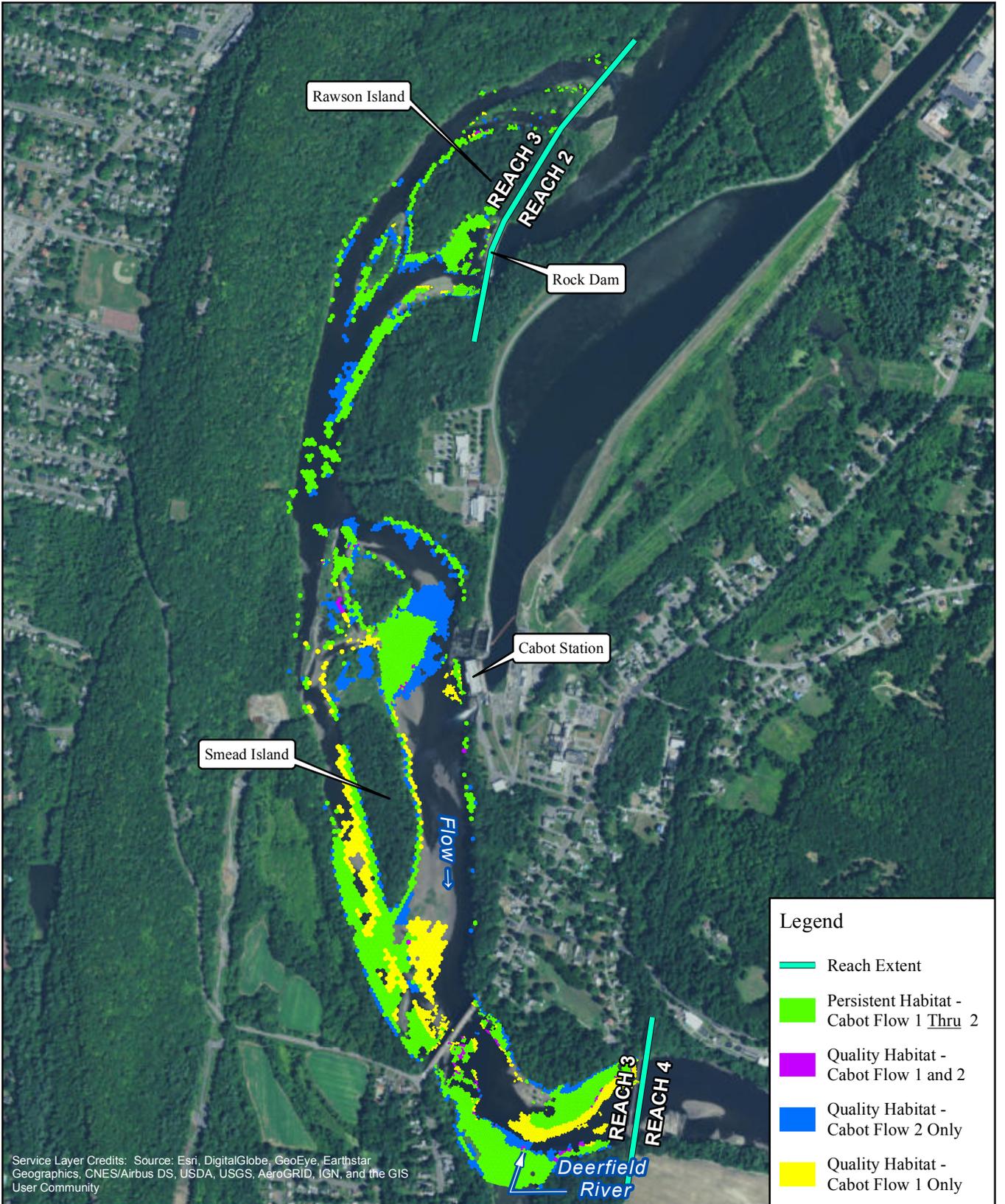
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- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

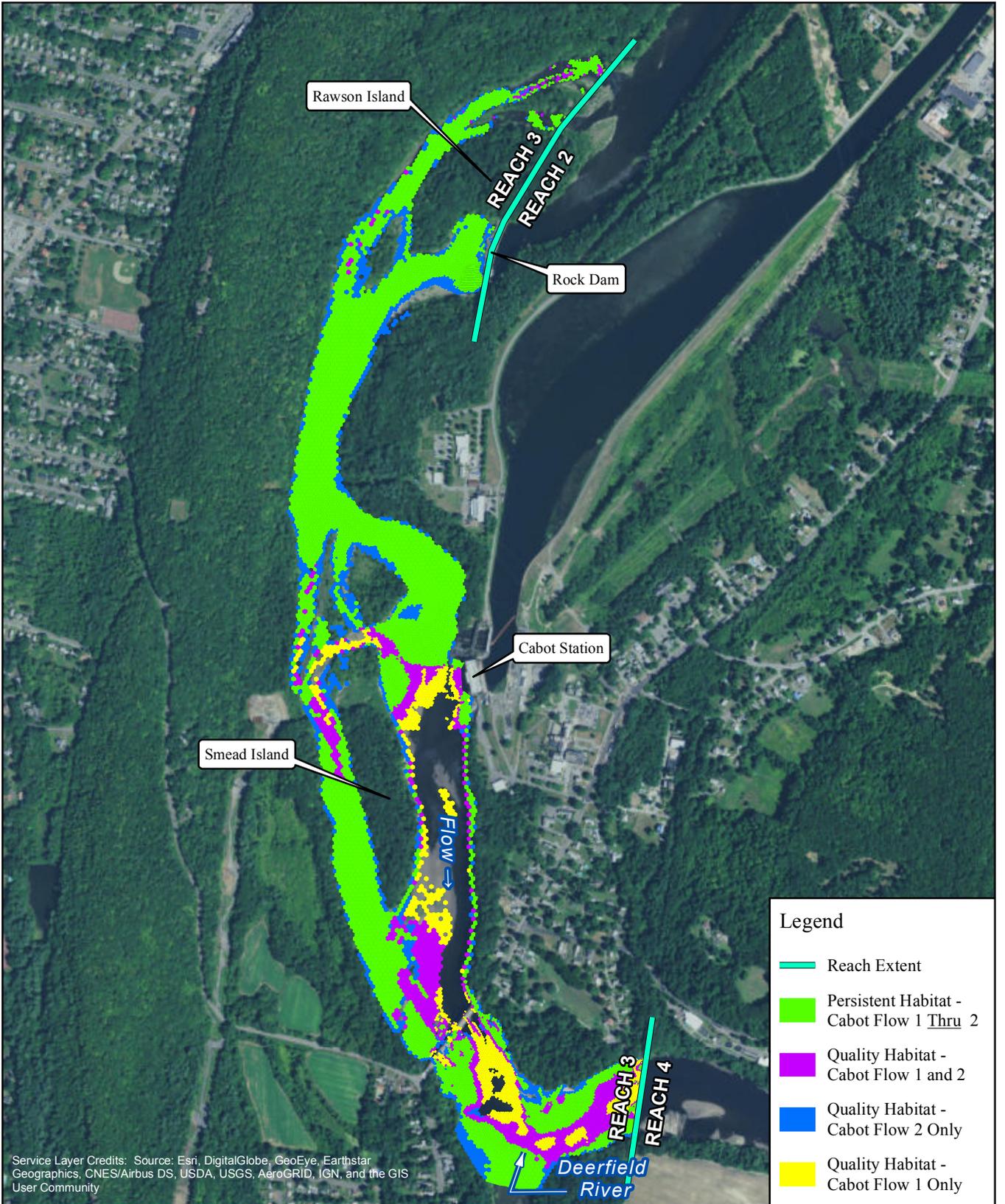
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



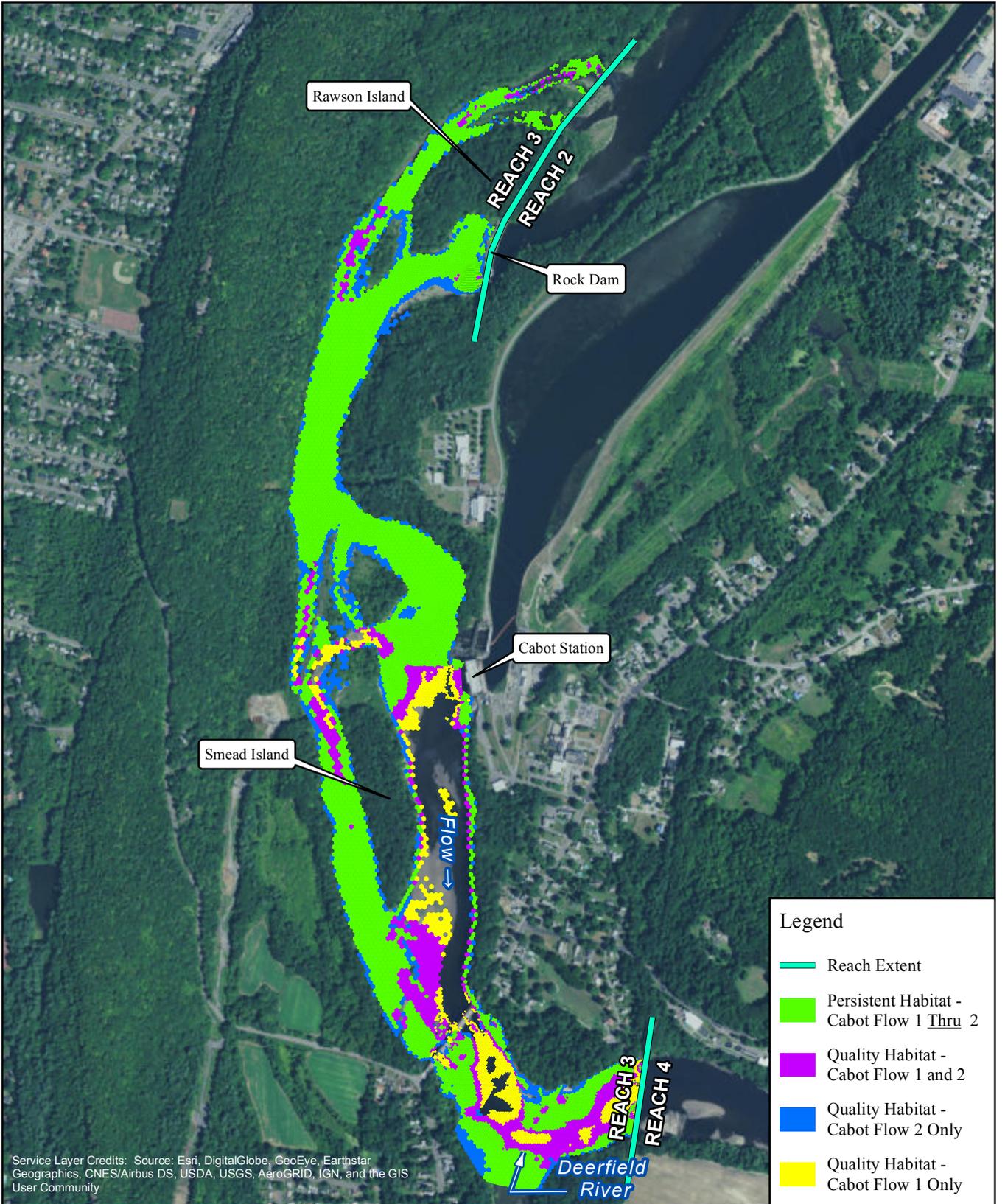
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



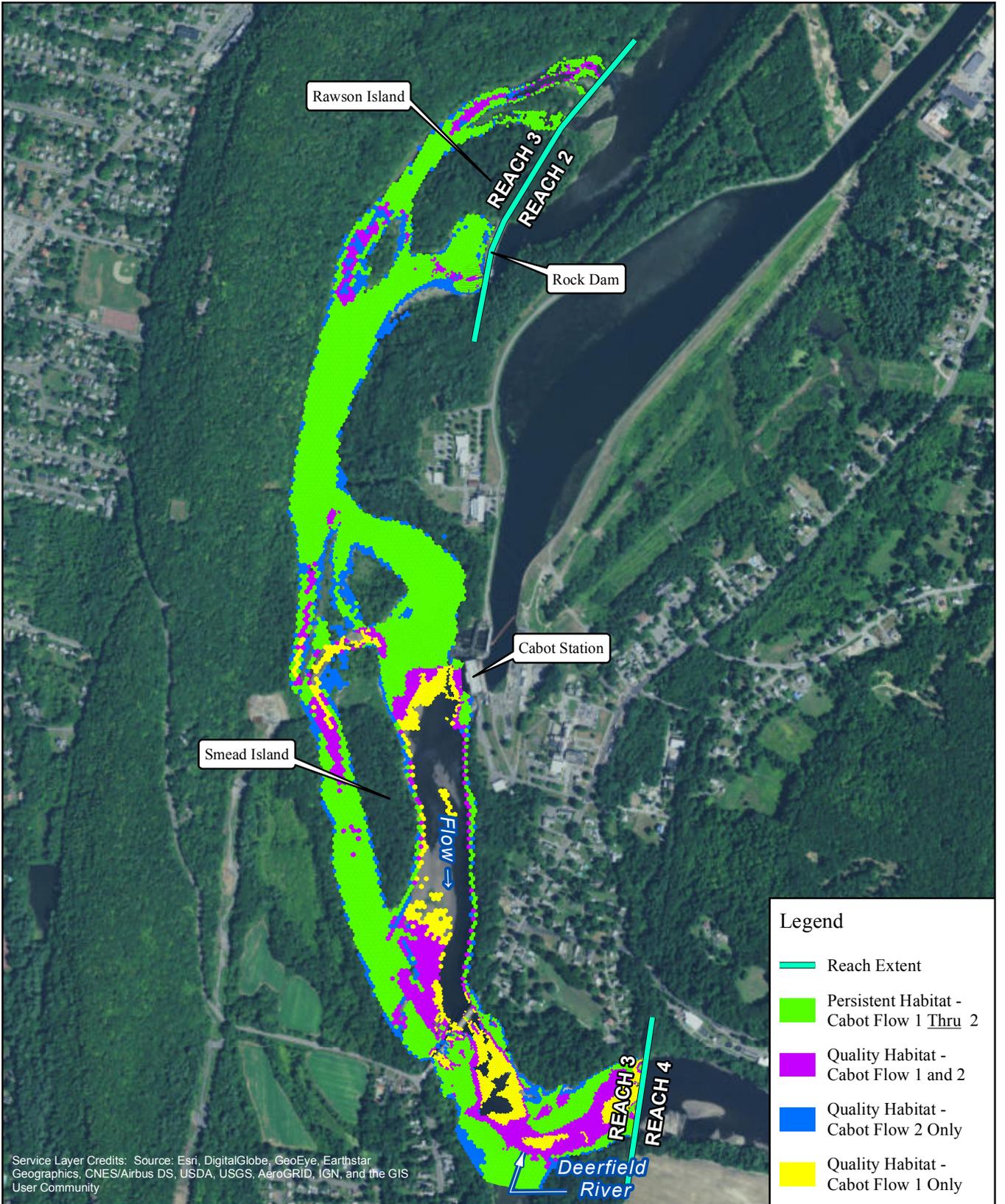
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 500 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



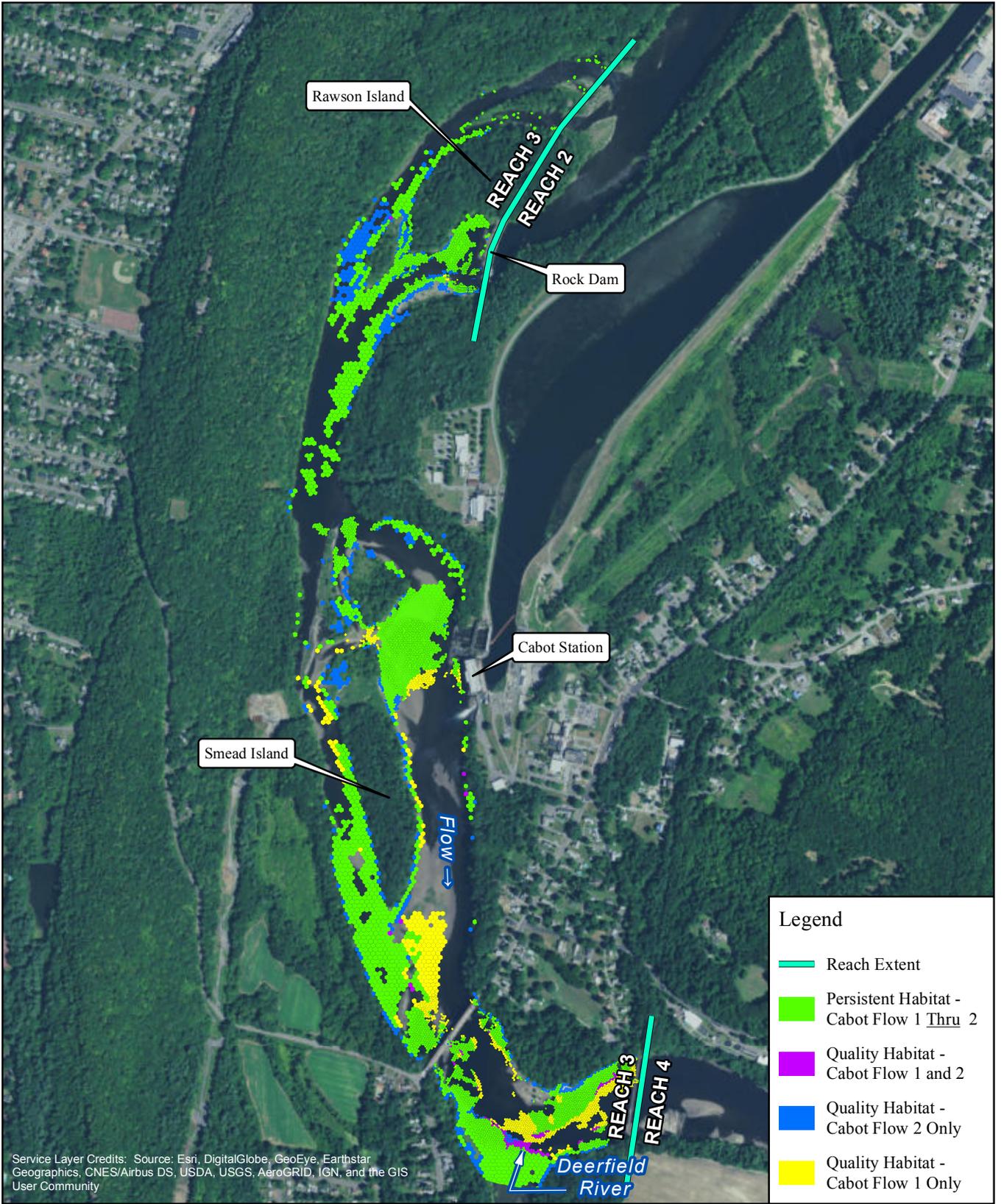
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



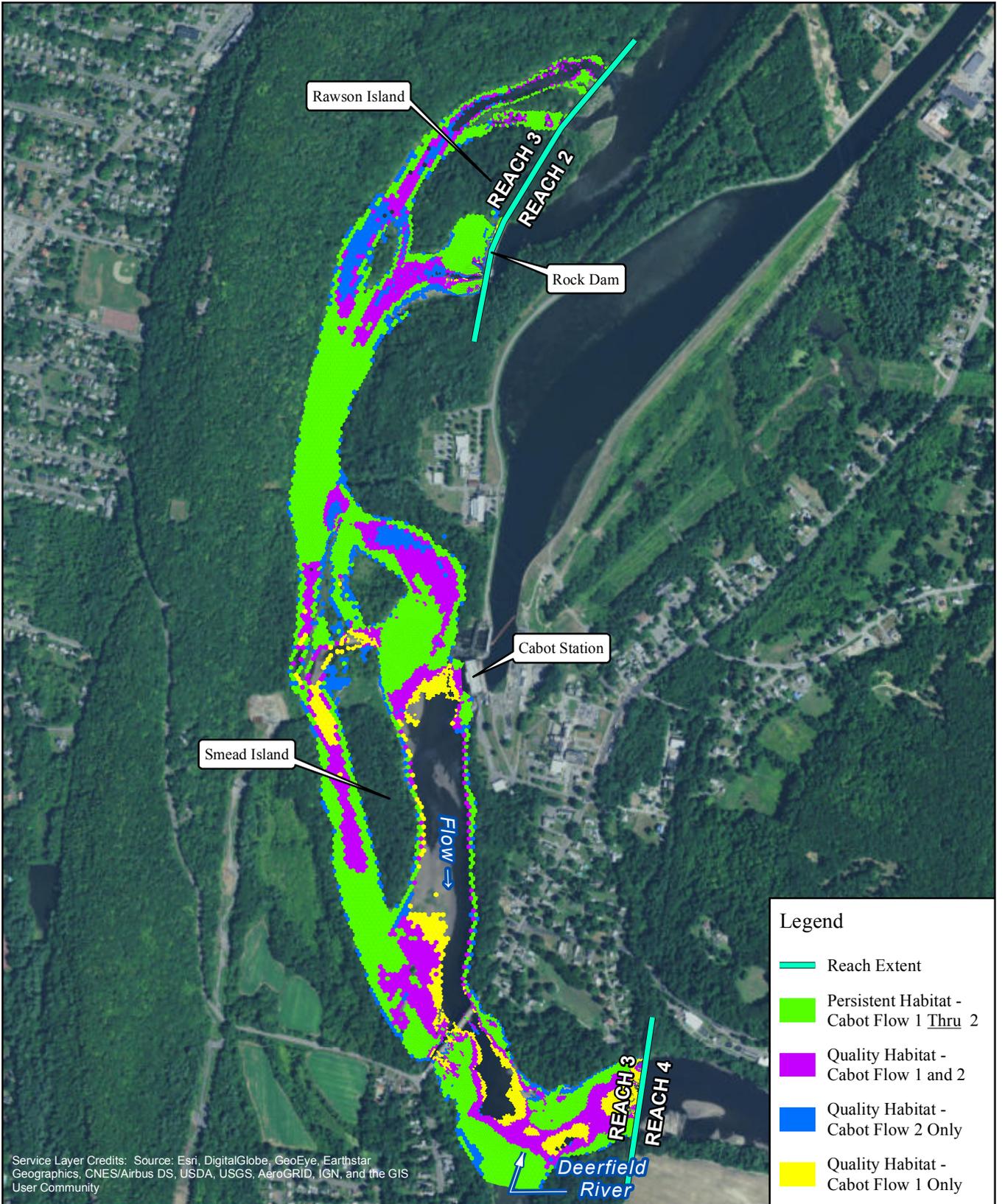
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
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- Quality Habitat - Cabot Flow 1 Only



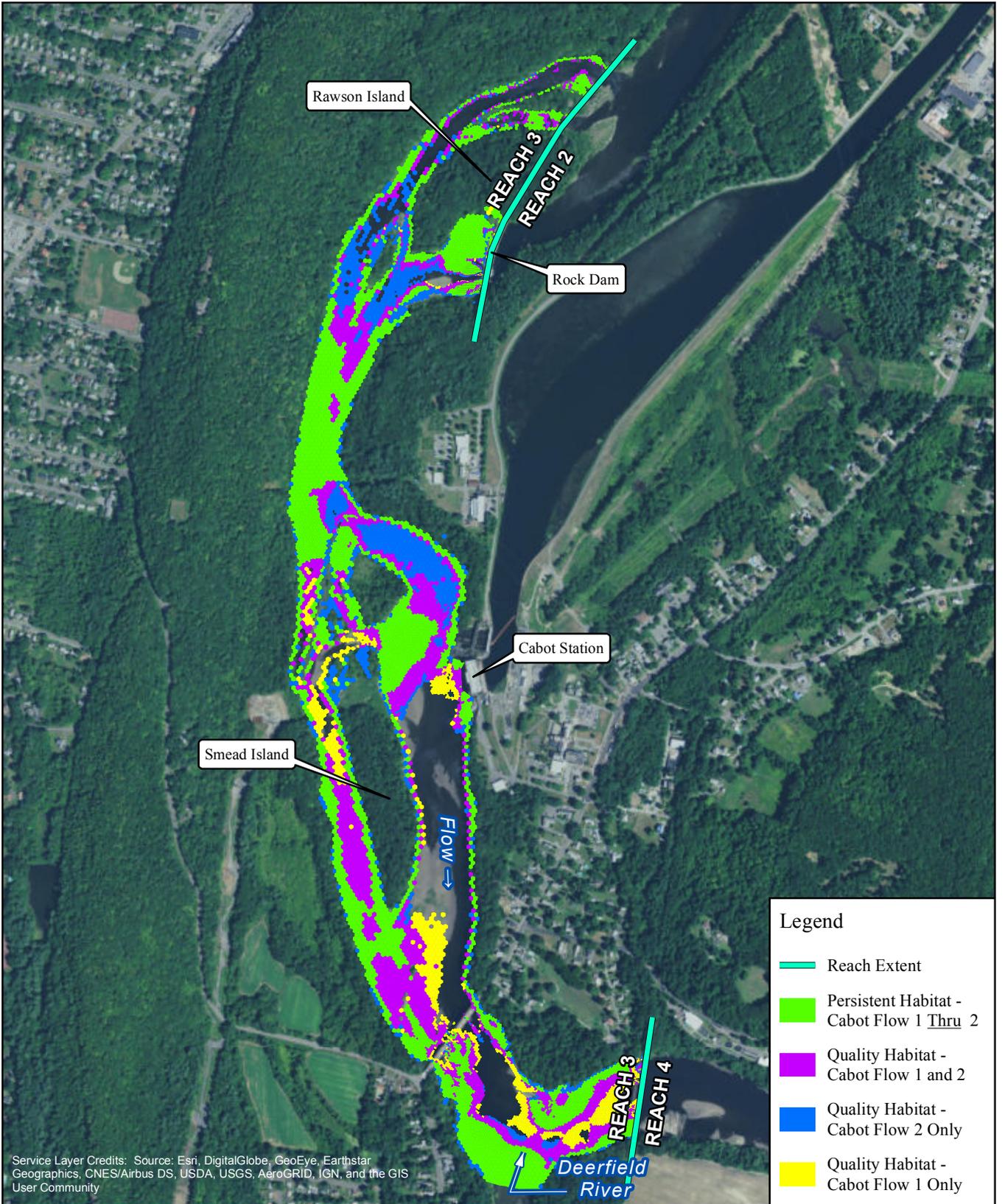
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



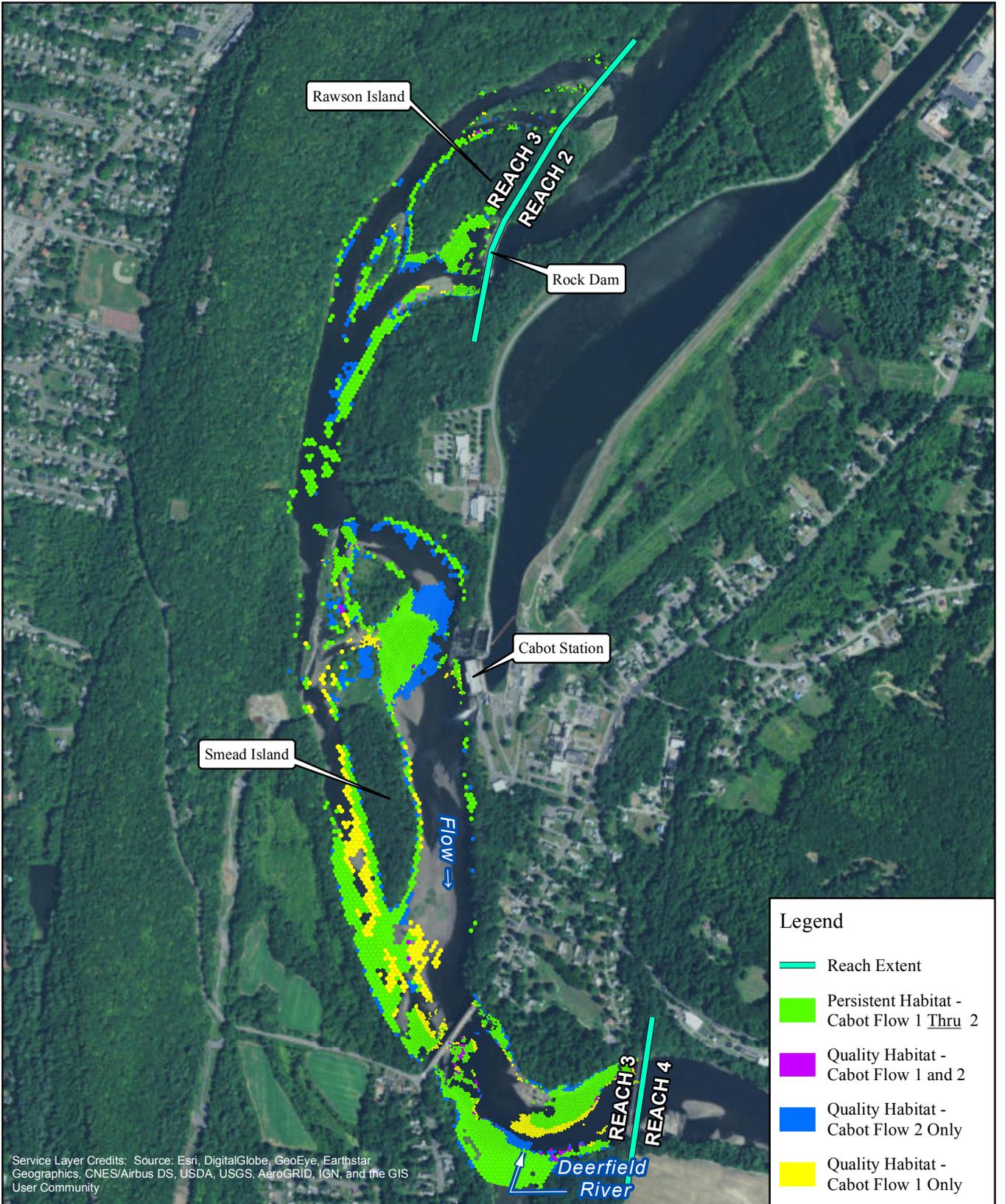
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

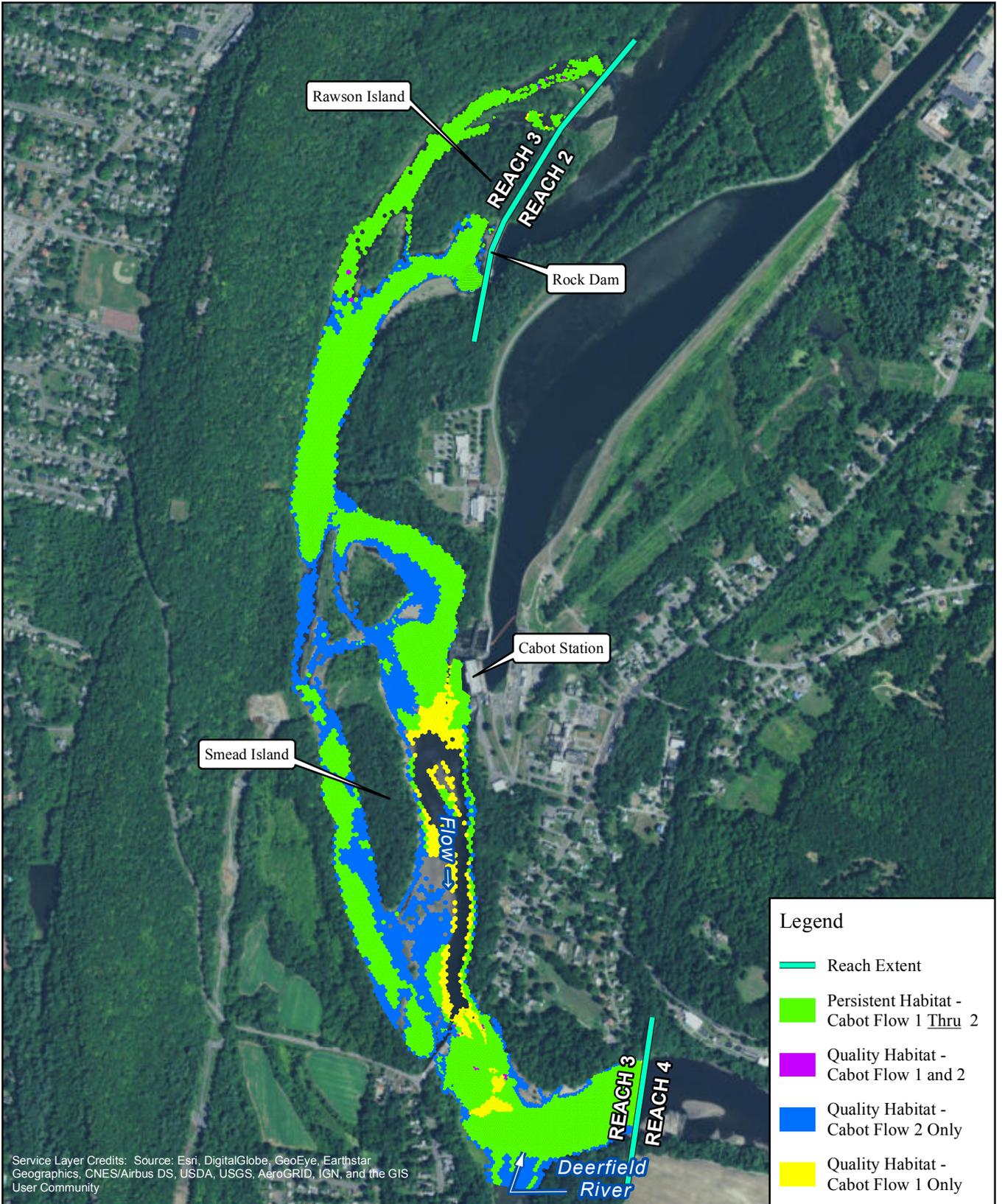
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RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Juvenile
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

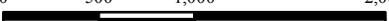
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- Quality Habitat - Cabot Flow 1 Only



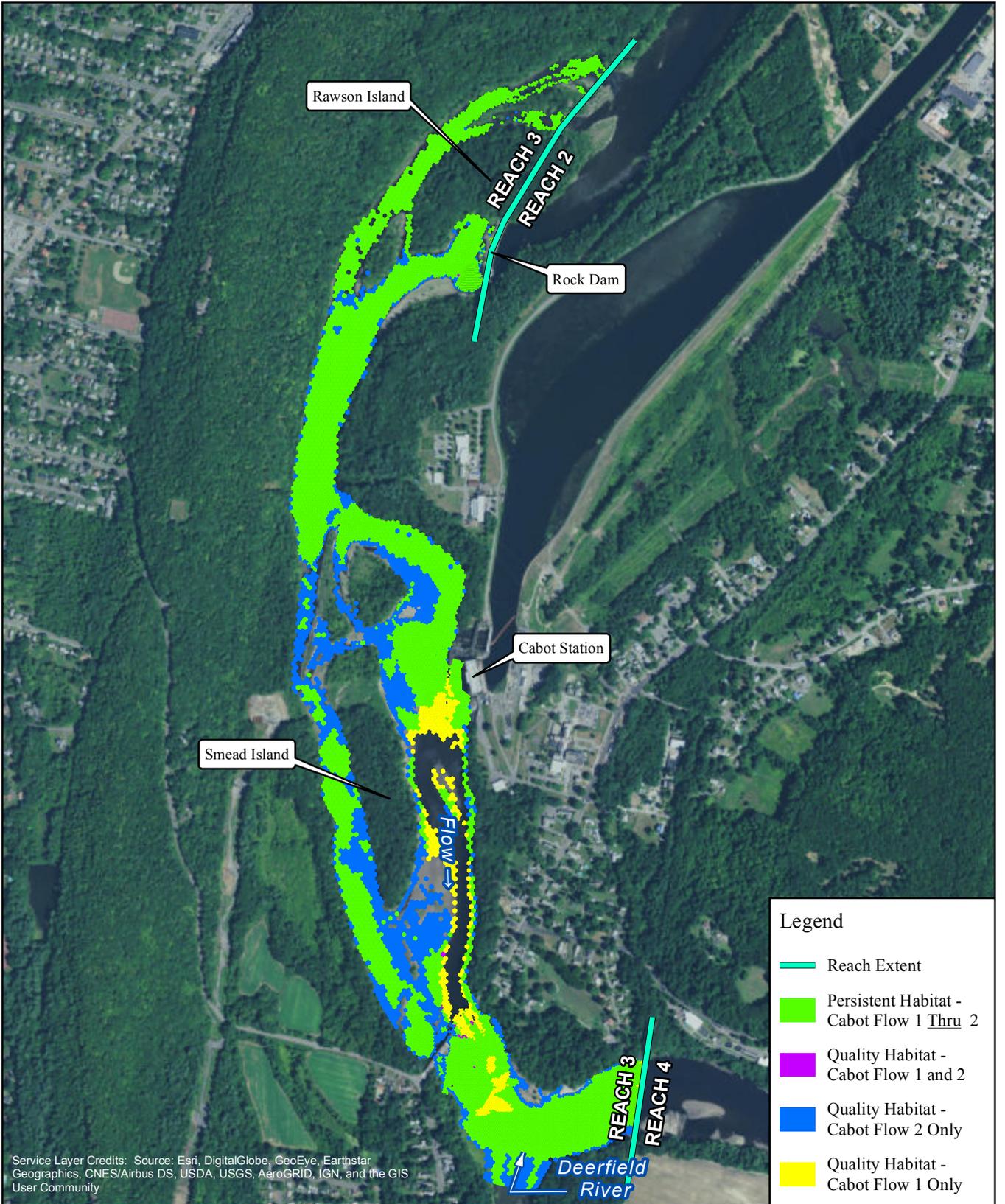
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RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet



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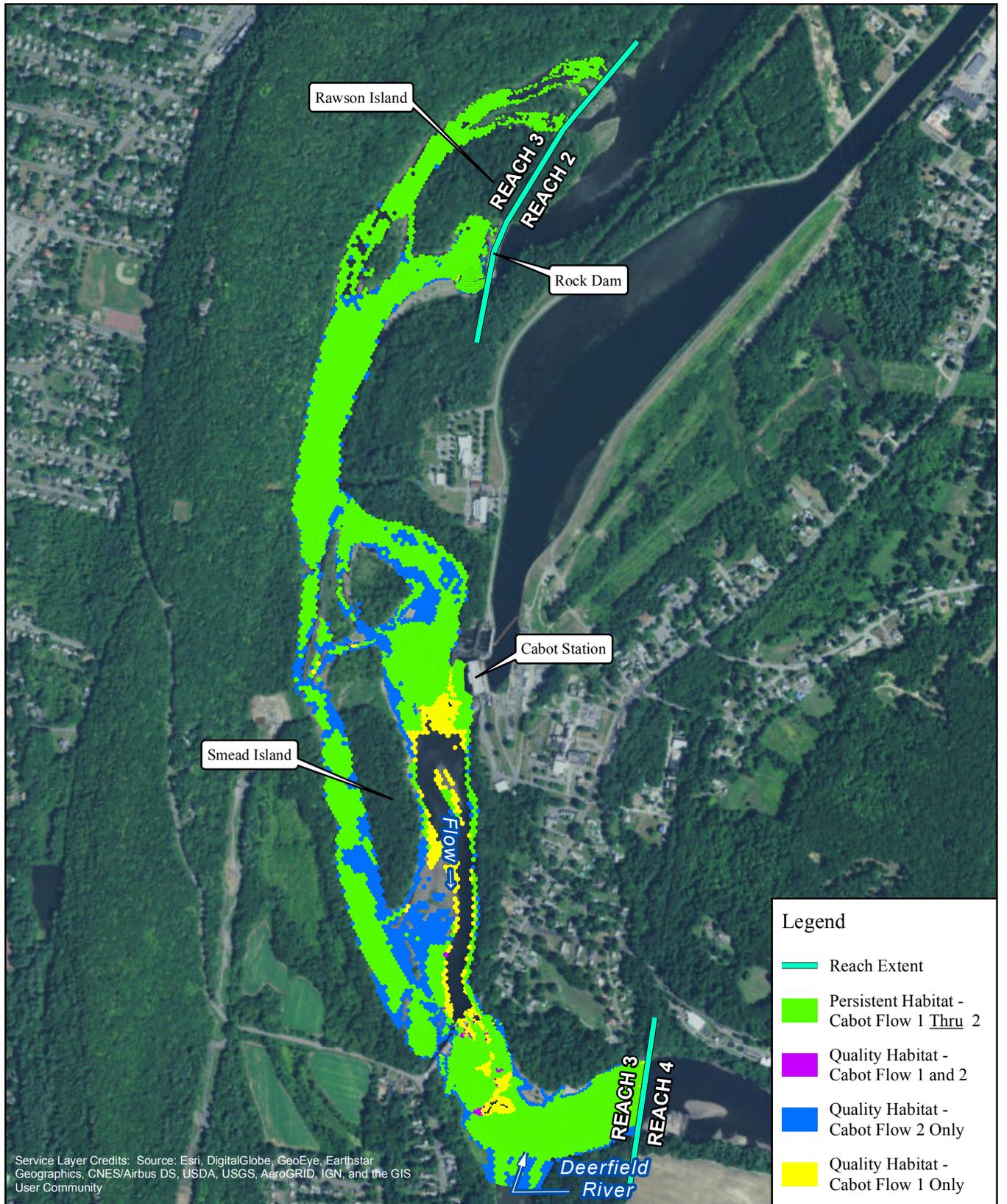
Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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- Quality Habitat - Cabot Flow 1 Only

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Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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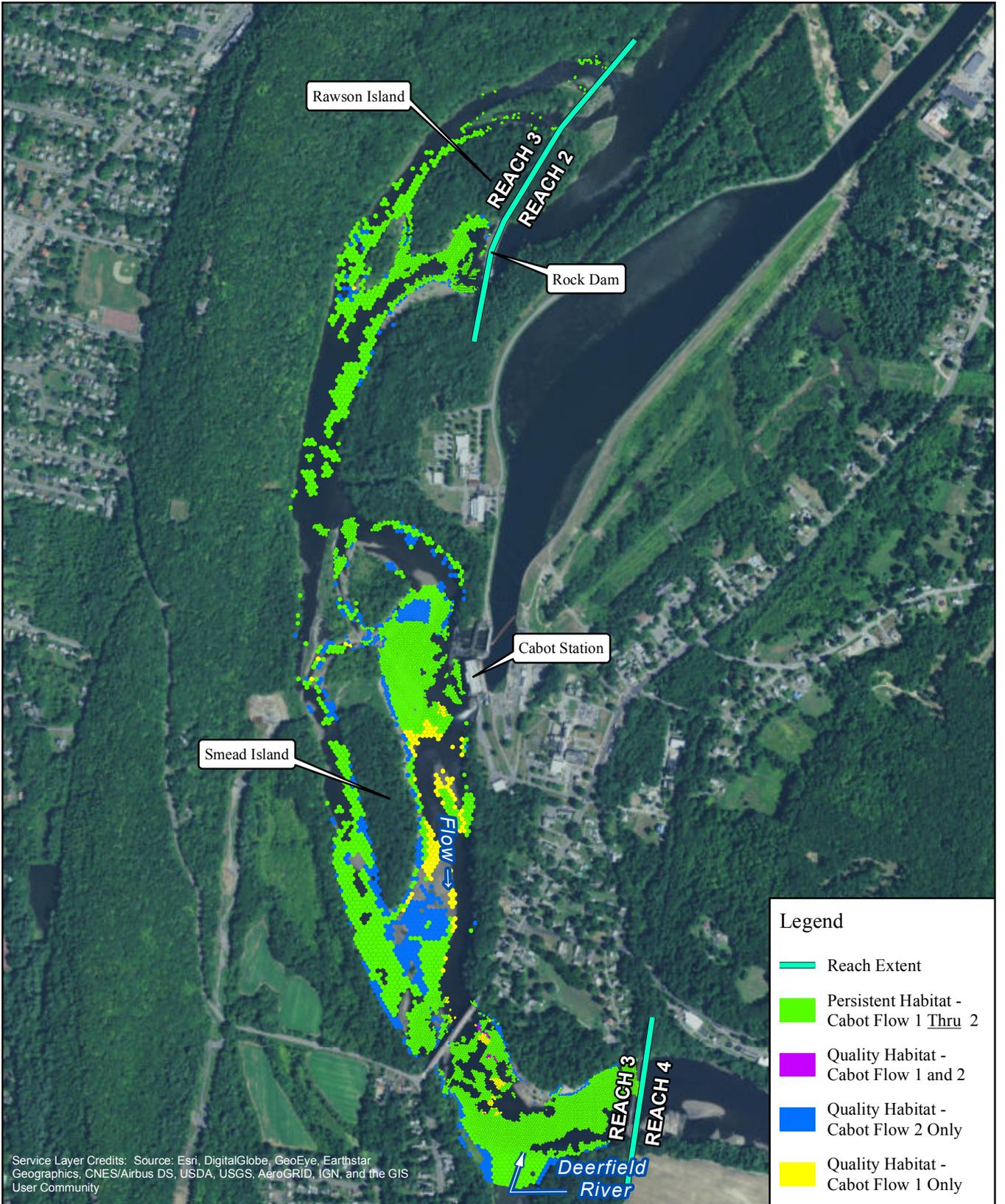


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Persistent Habitat
 Yellow Lampmussel-Adult
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Legend

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- Persistent Habitat - Cabot Flow 1 Thru 2
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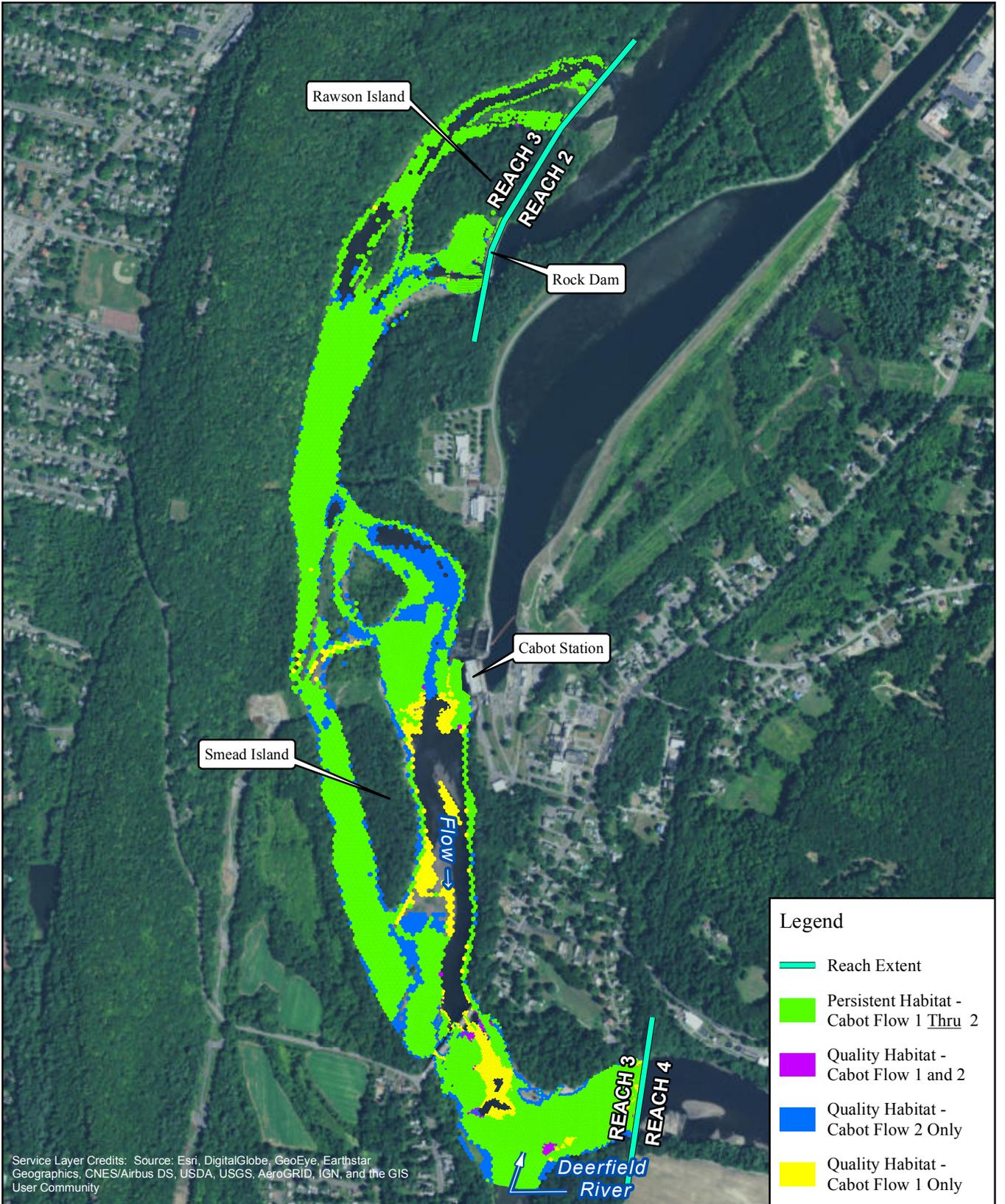
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Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 2500 cfs
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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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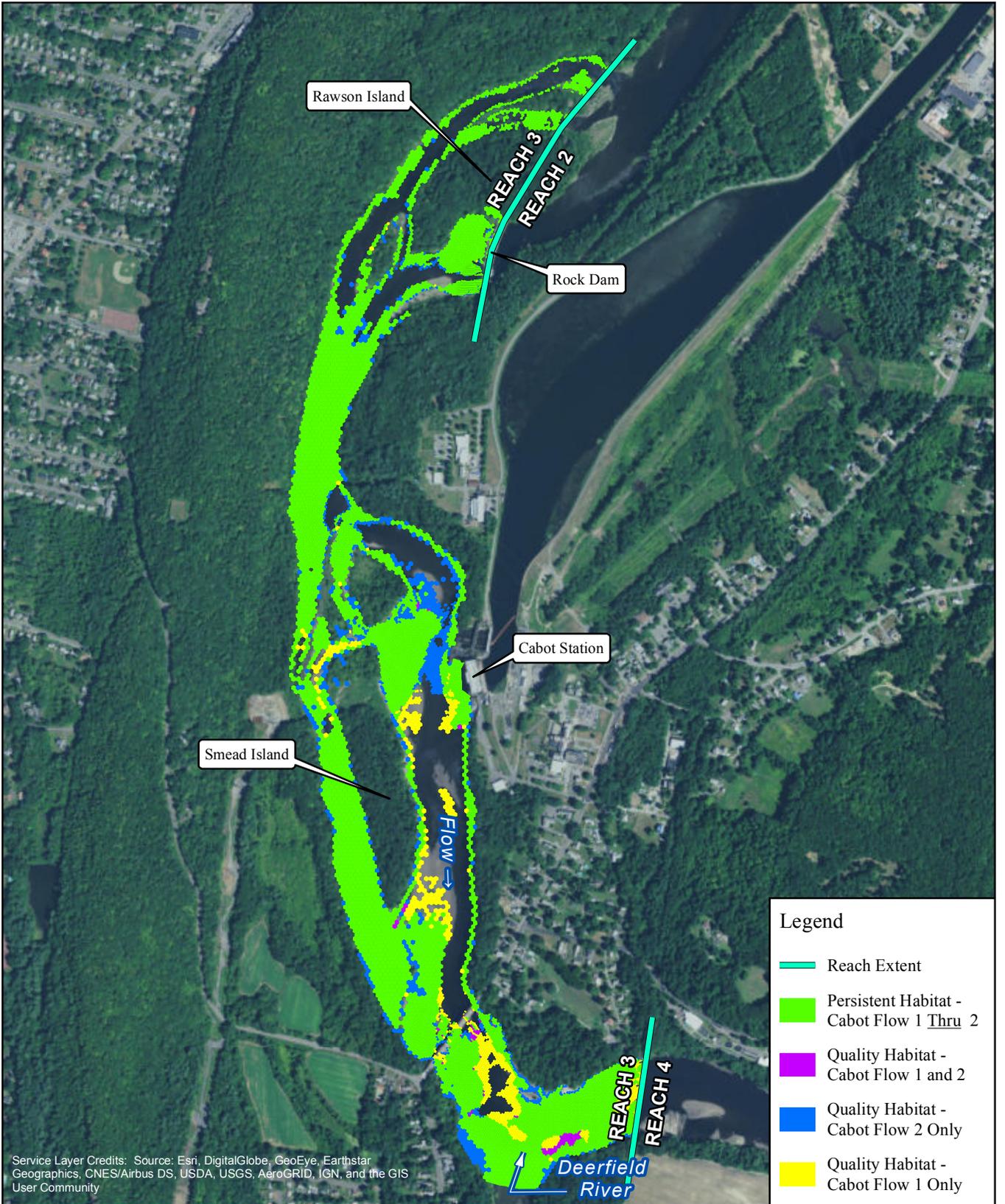
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RELICENSING STUDY 3.3.1

N

0 500 1,000 2,000 Feet

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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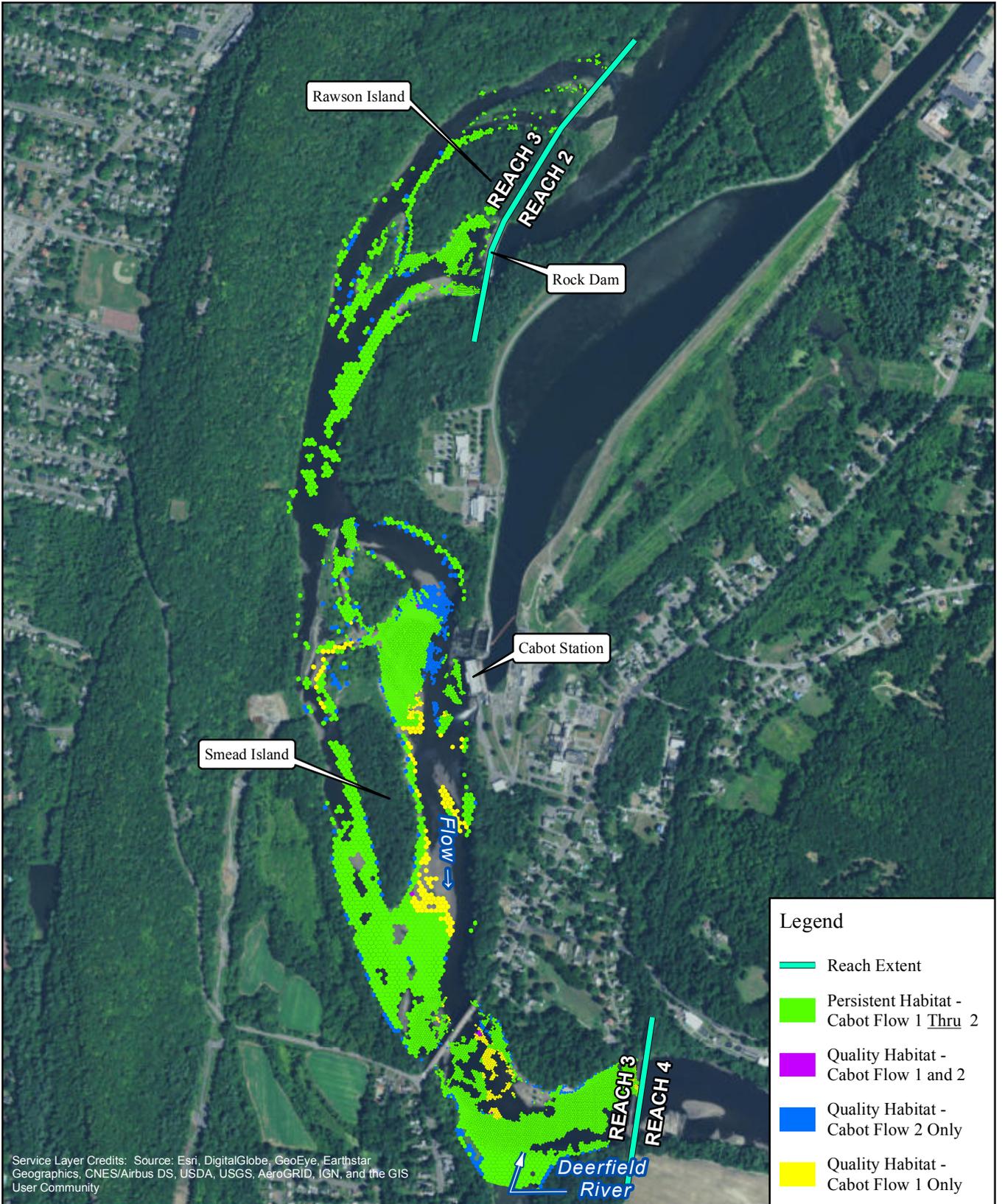


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Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



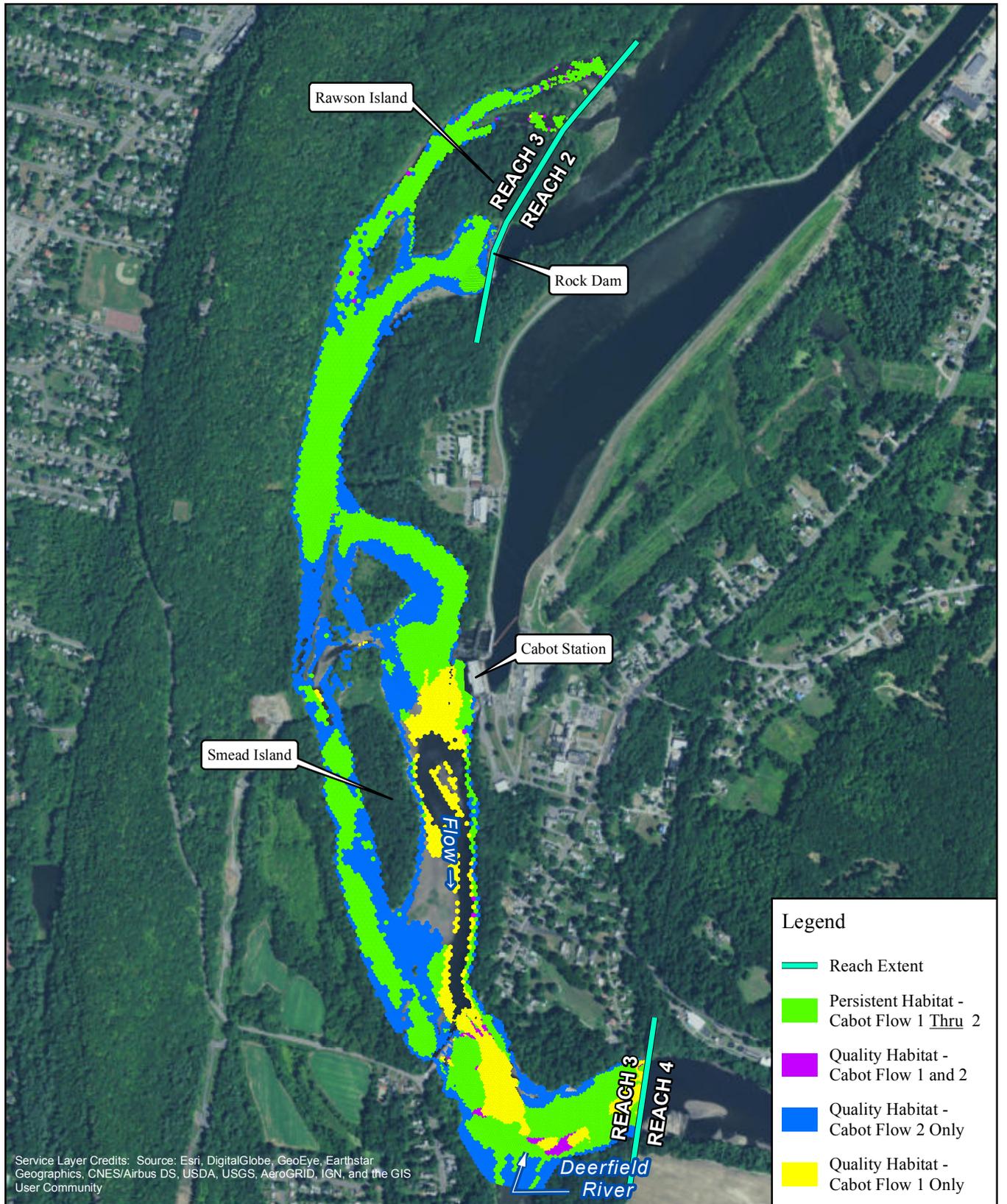
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 Turners Falls Hydroelectric Project No. 1889

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Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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Legend

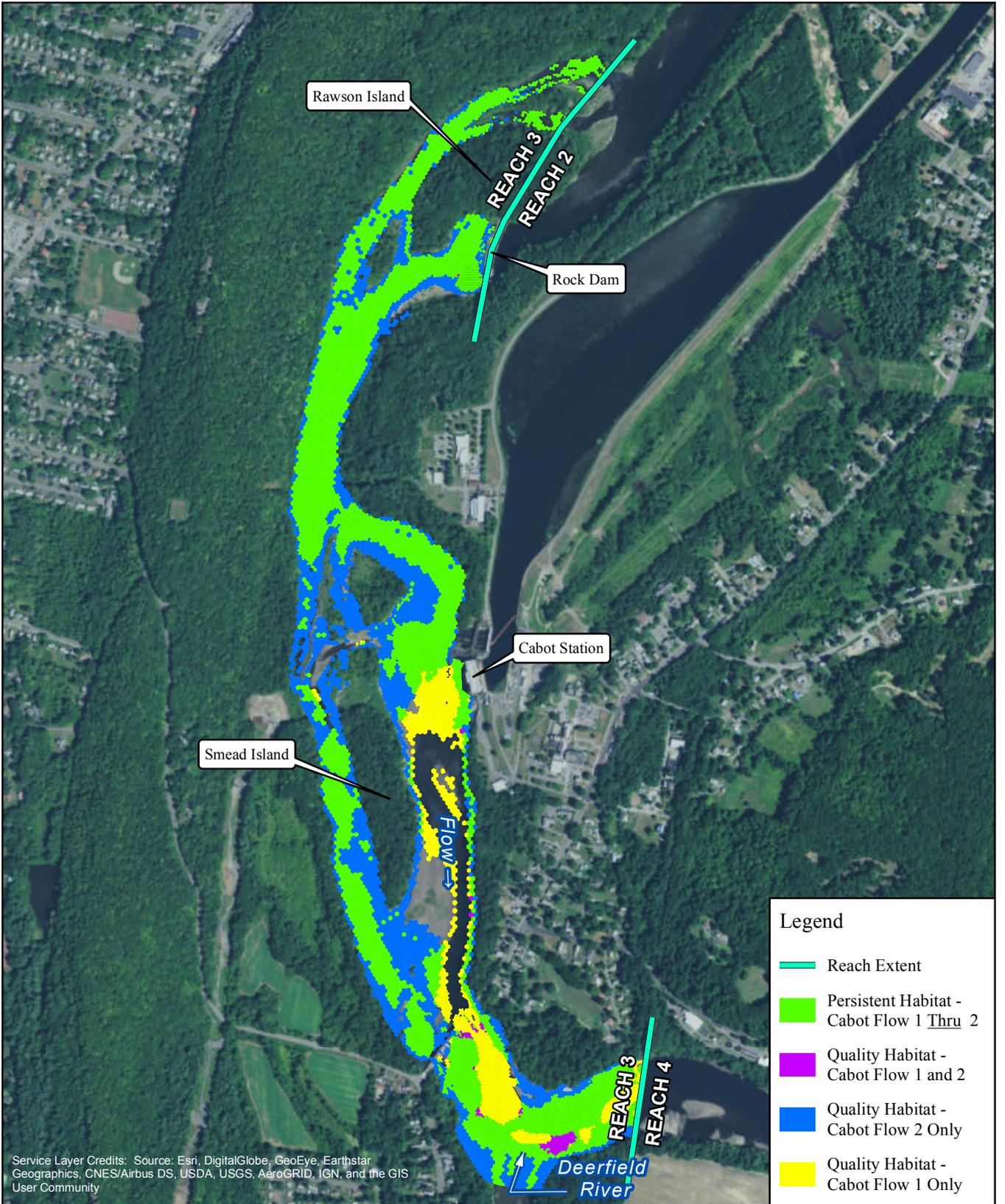
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RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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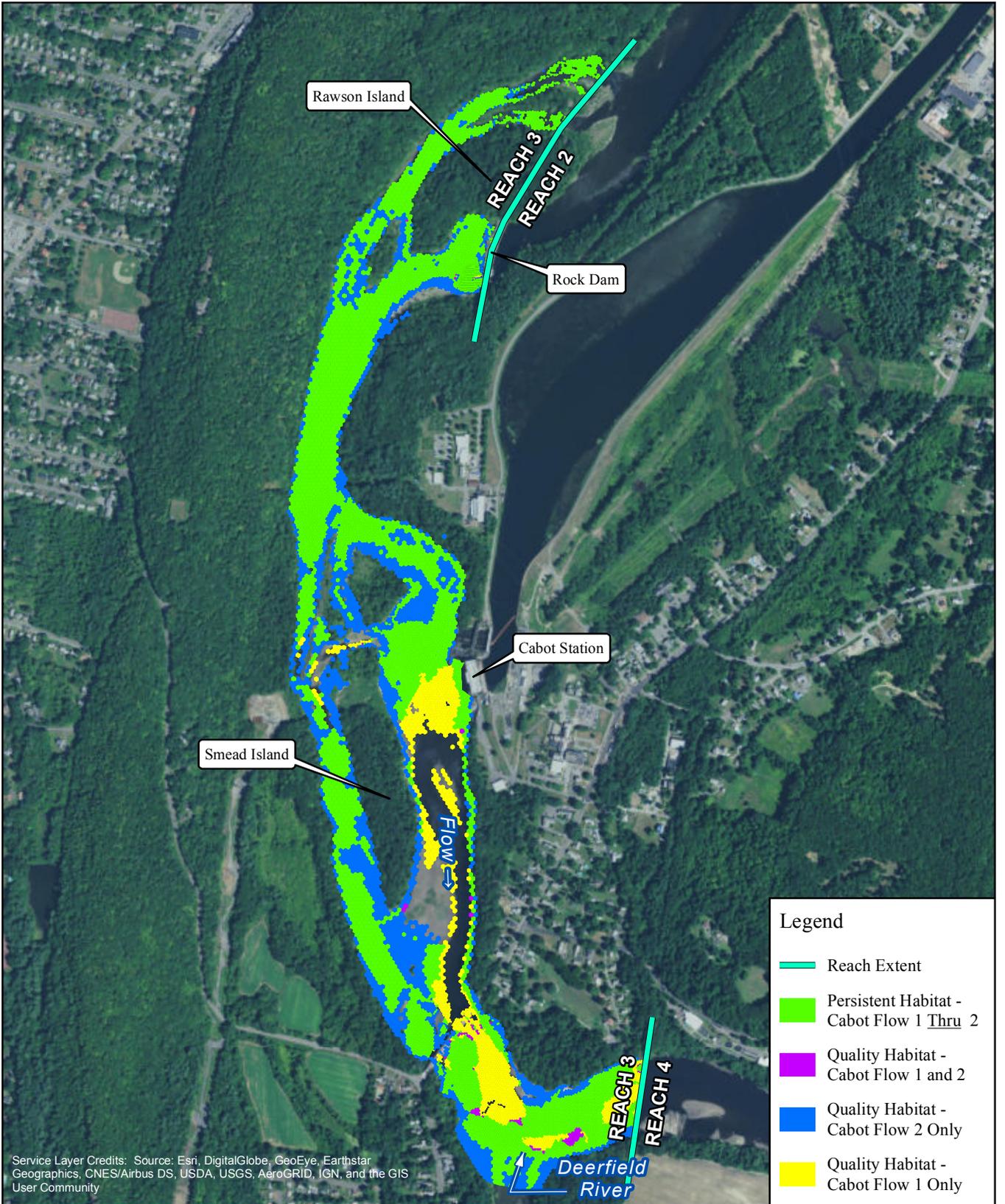


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 500 cfs
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 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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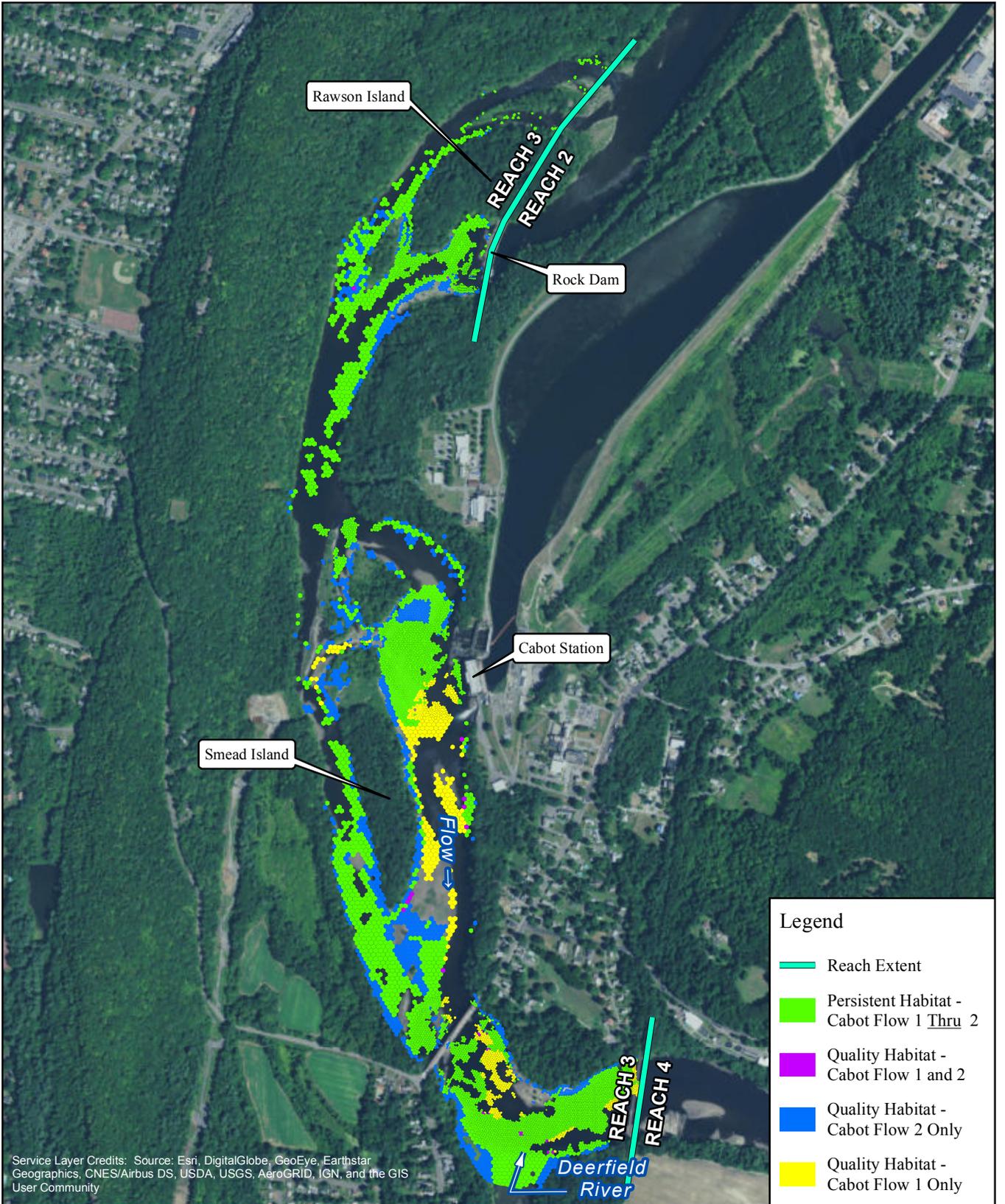
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 1000 cfs
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 Cabot Flow 2: 14000 cfs

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Legend

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- Persistent Habitat - Cabot Flow 1 Thru 2
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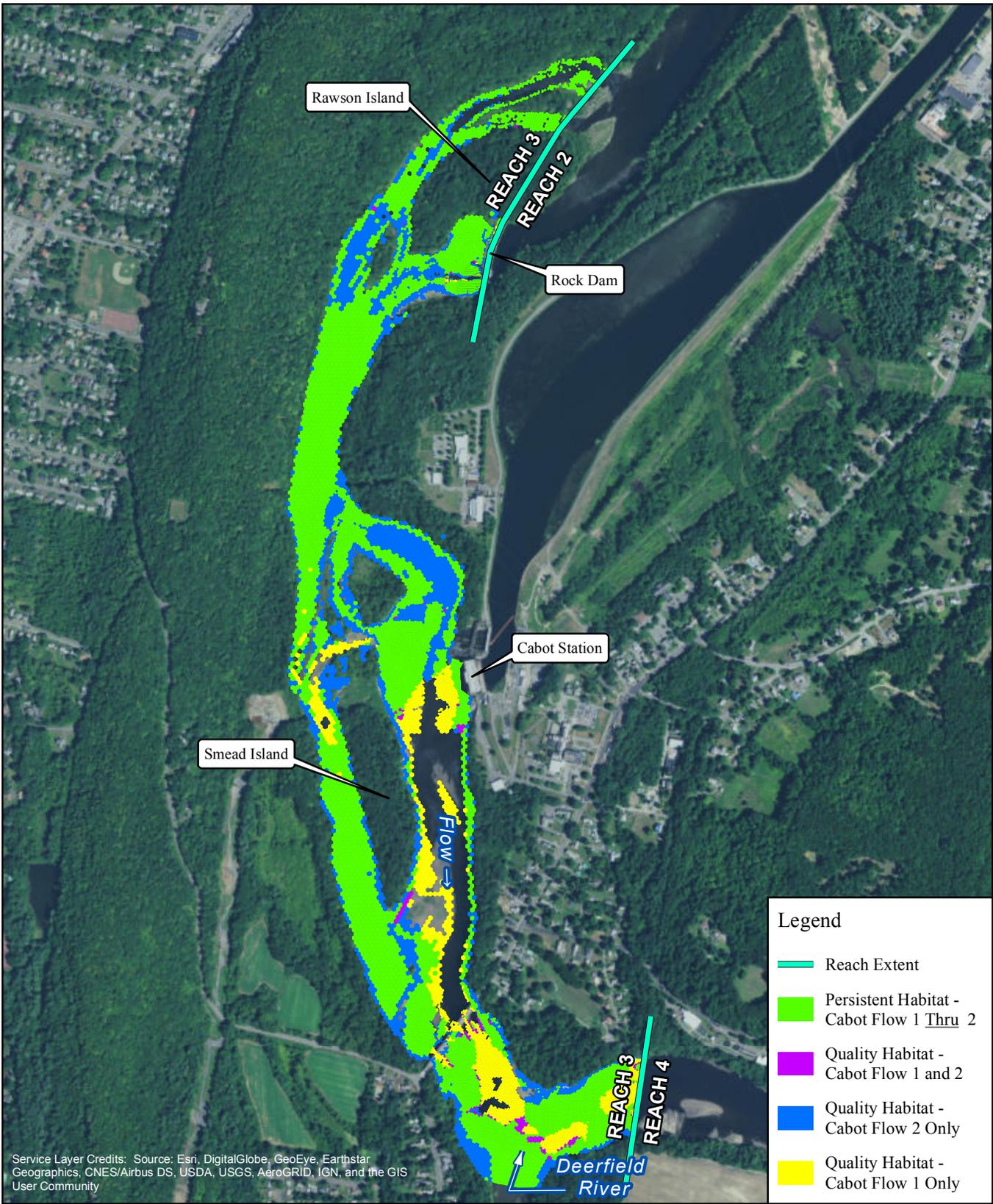
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
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- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

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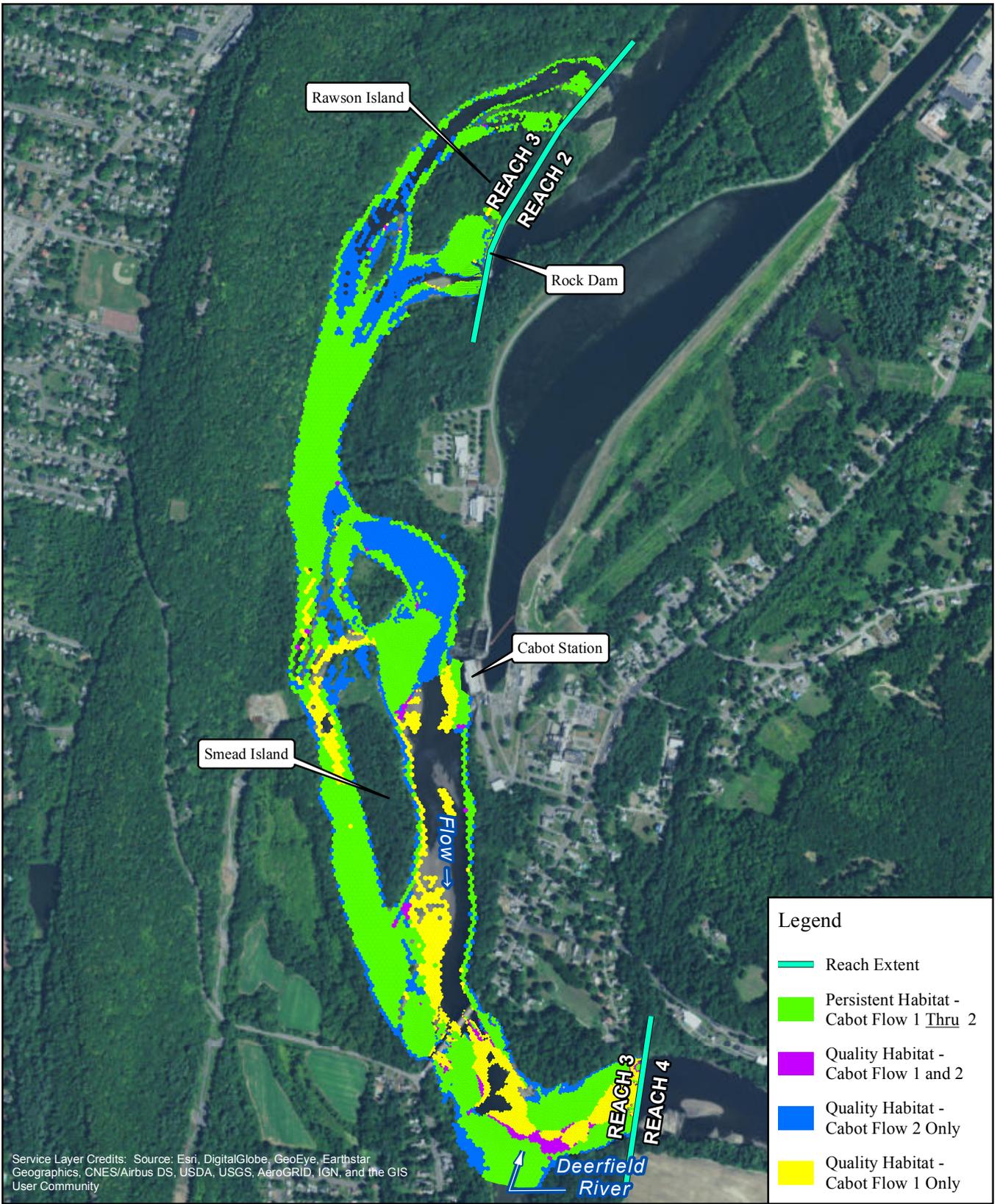
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Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1

Persistent Habitat
Yellow Lampmussel-Adult
Bypass Flow: 3000 cfs
Cabot Flow 1: 2500 cfs
Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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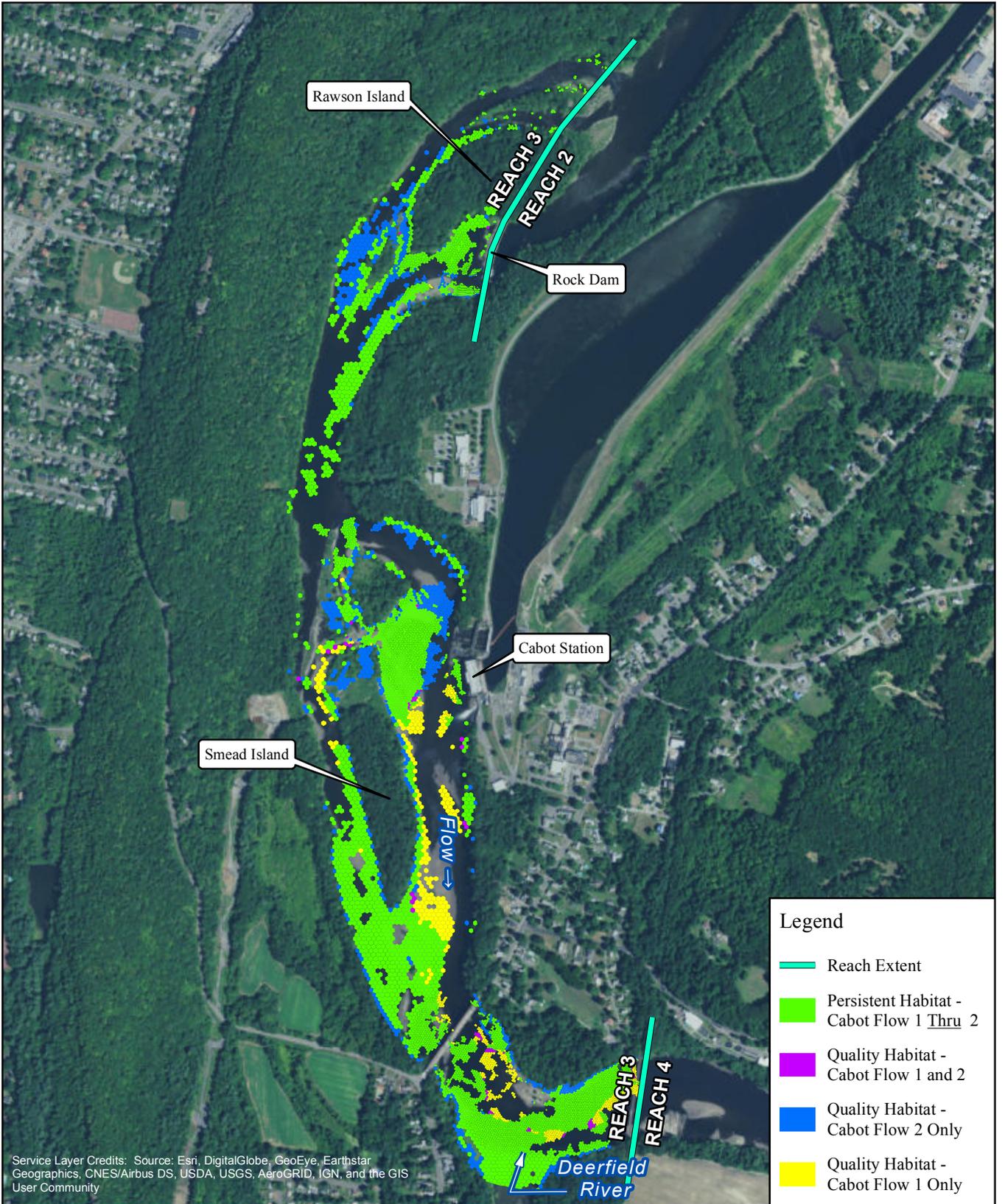
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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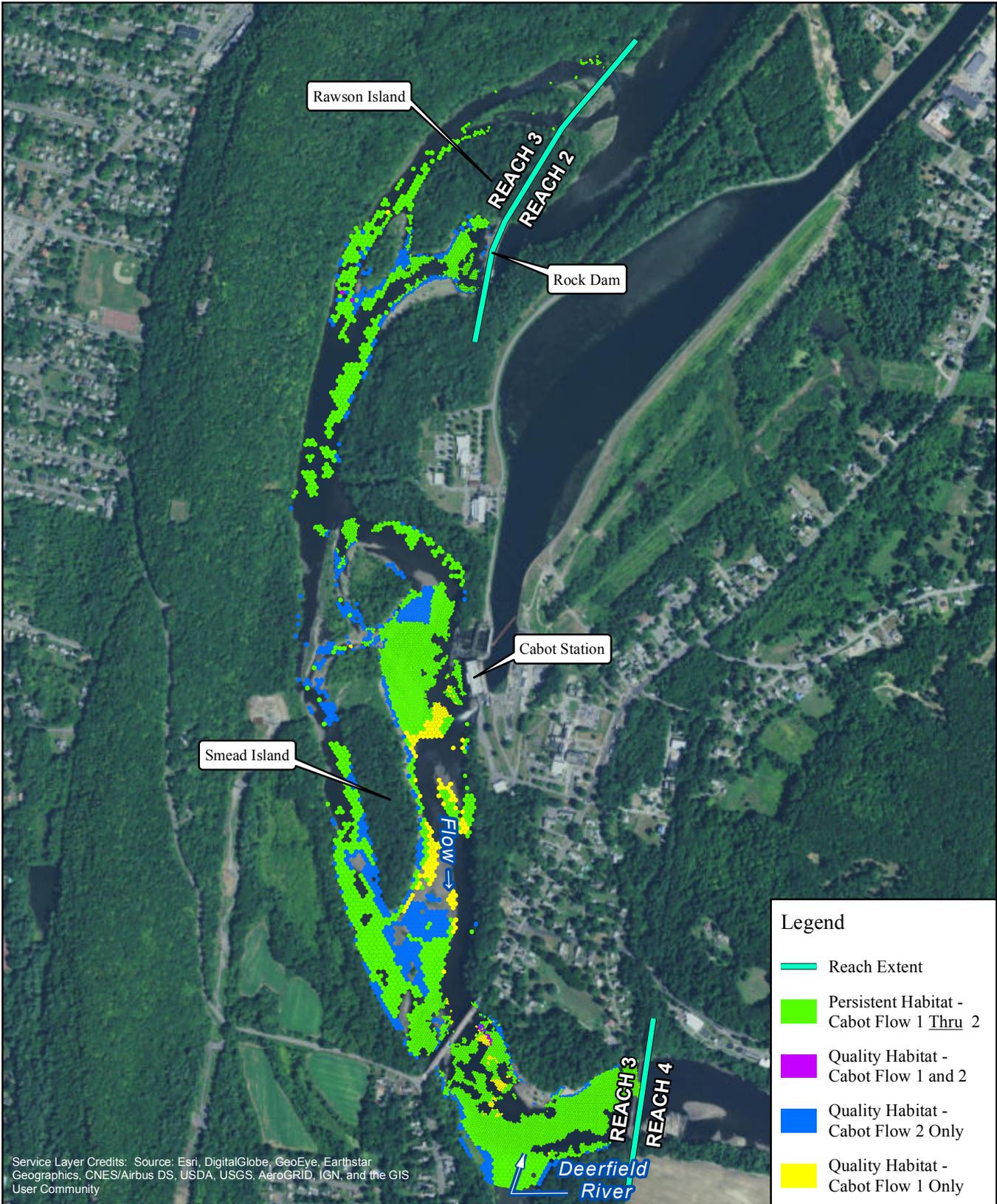
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

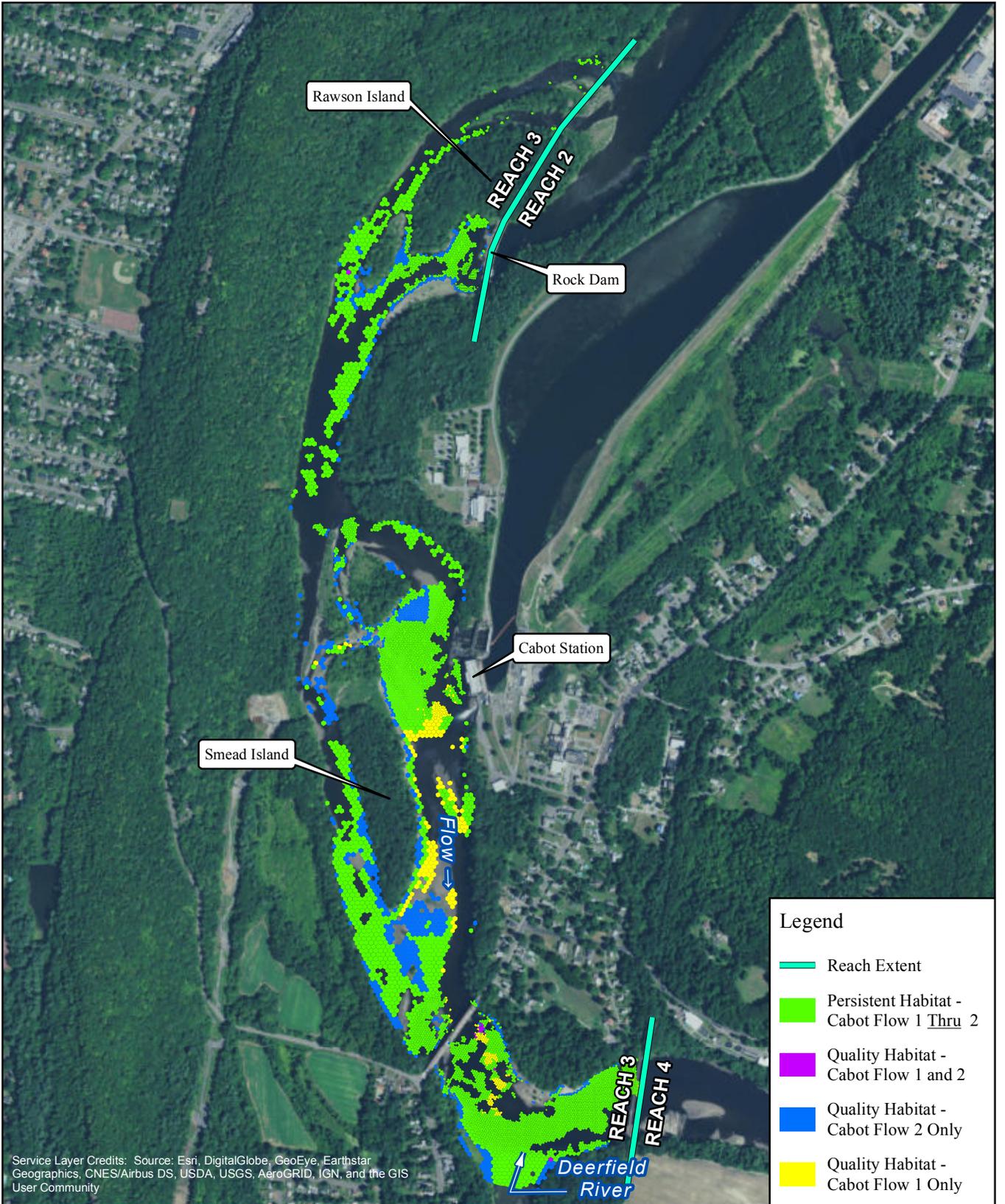
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- Persistent Habitat - Cabot Flow 1 Thru 2
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- Quality Habitat - Cabot Flow 2 Only
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

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- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
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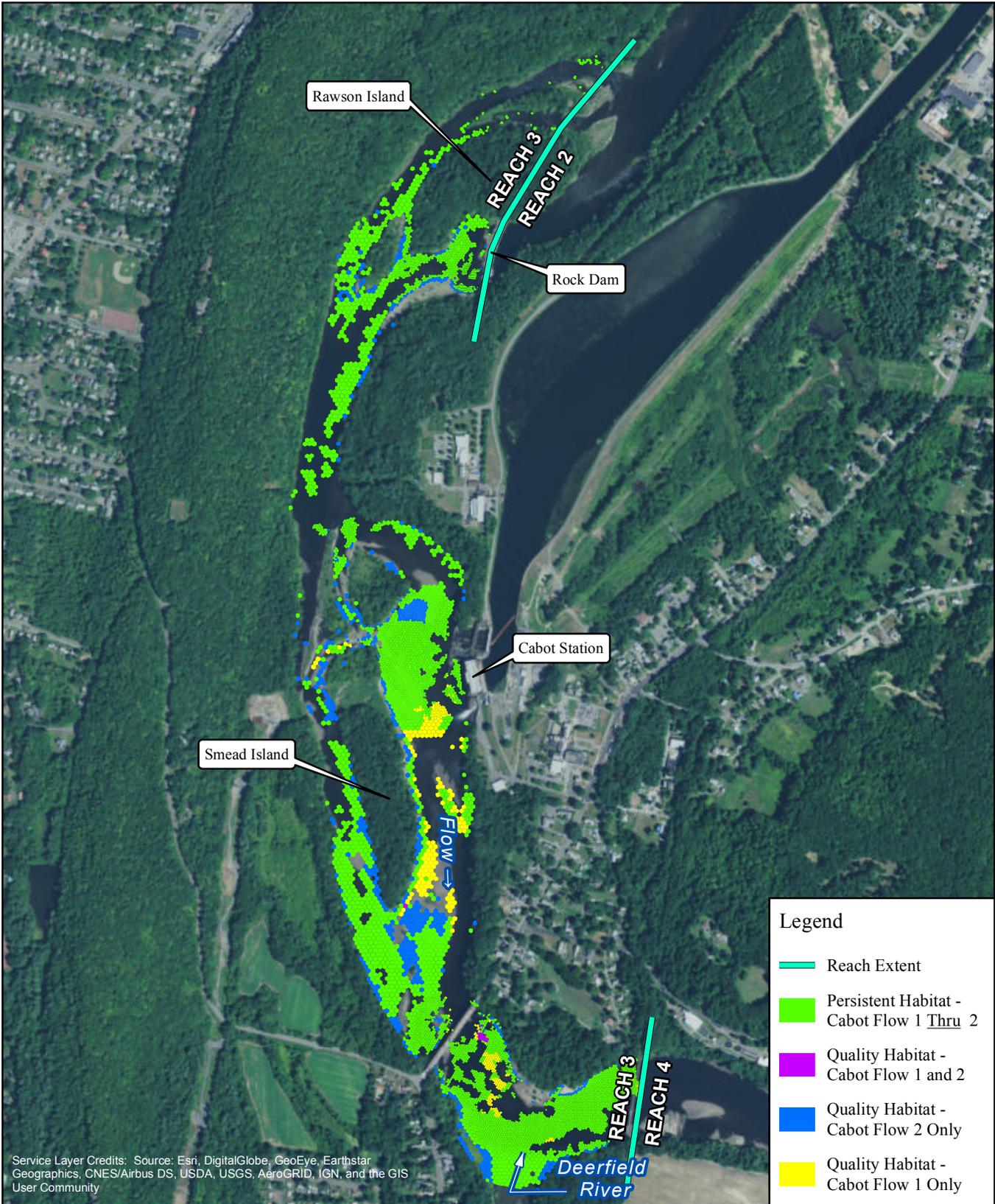
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
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Legend

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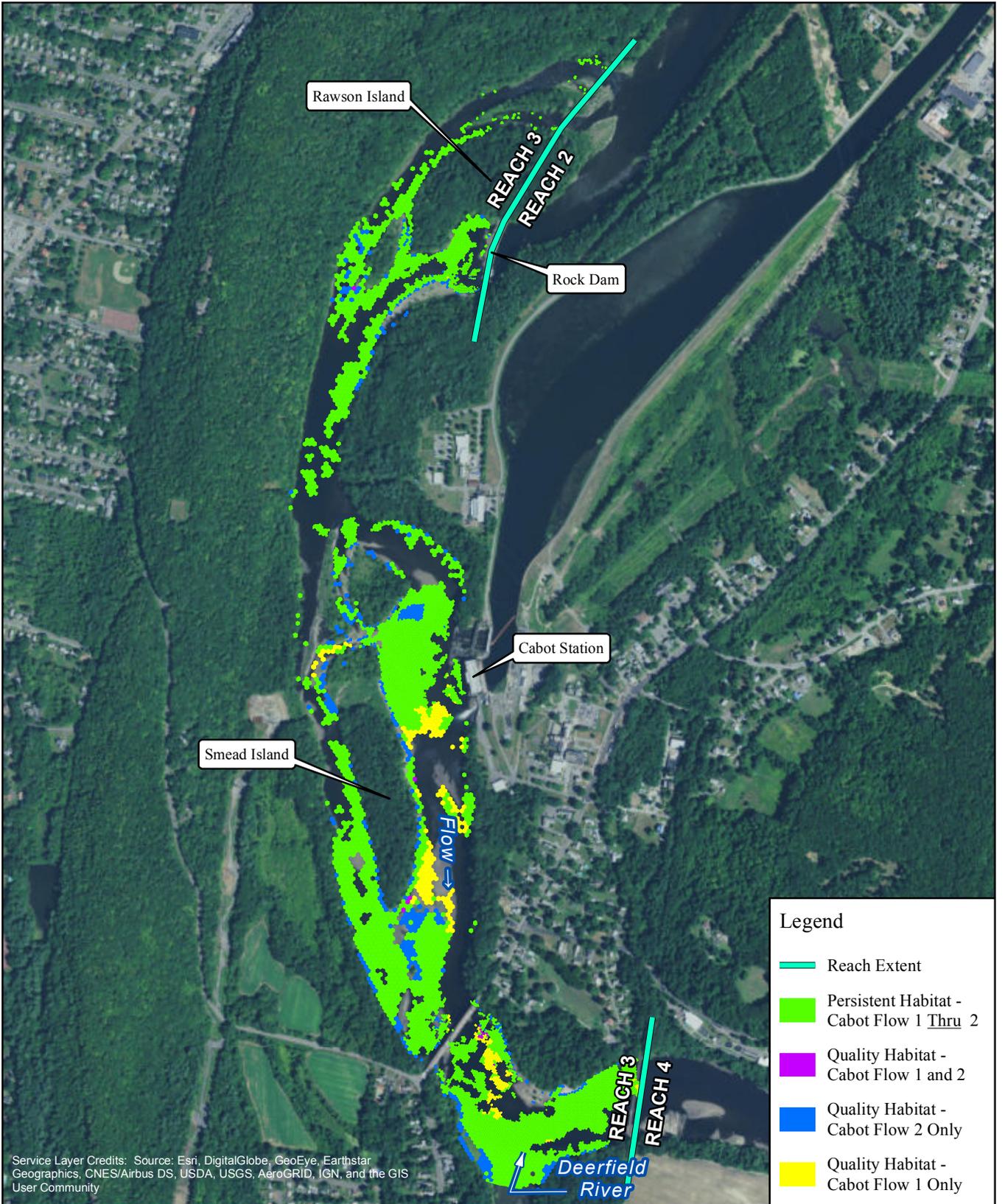
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

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- Persistent Habitat - Cabot Flow 1 Thru 2
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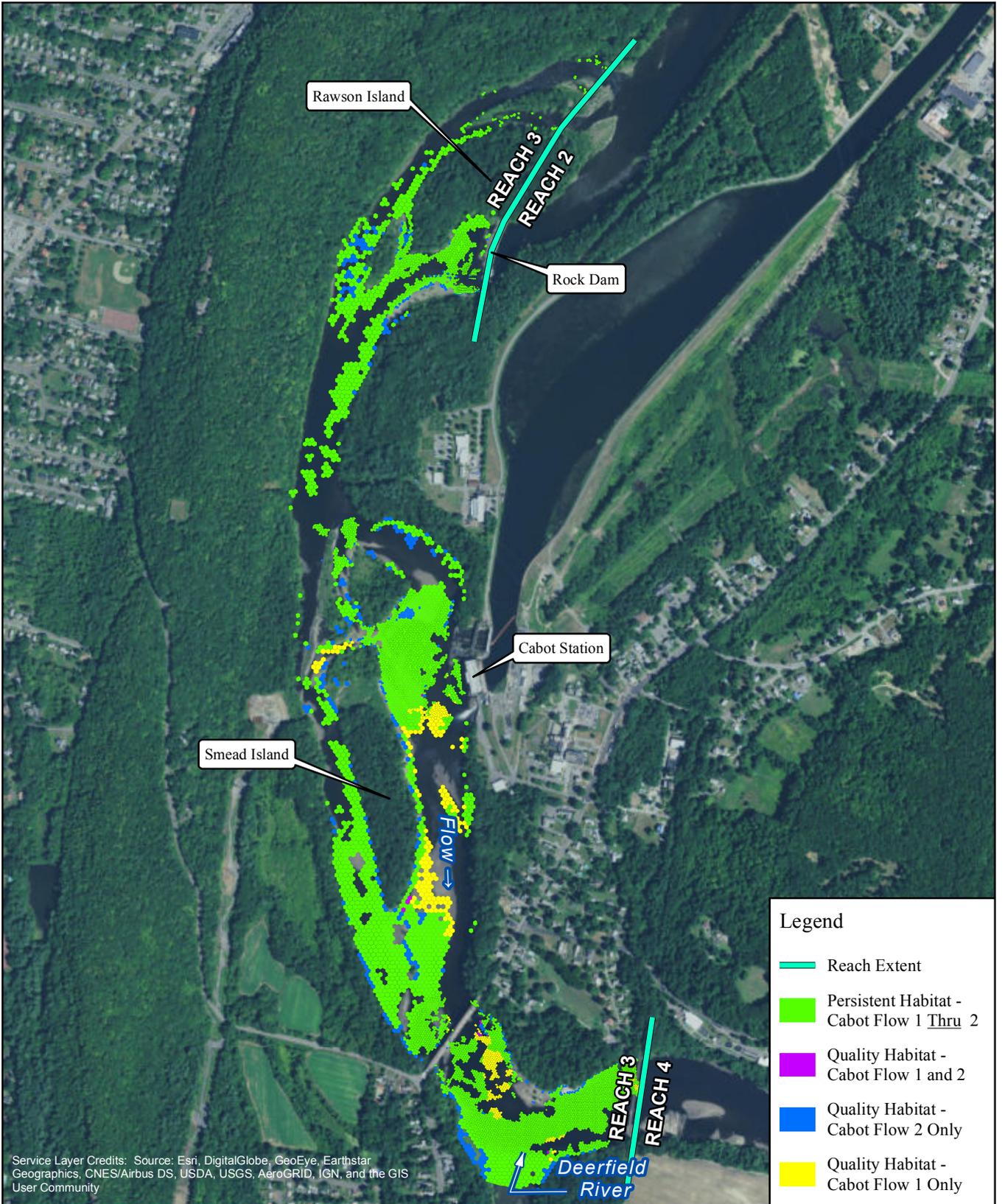
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Legend

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- Persistent Habitat - Cabot Flow 1 Thru 2
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N

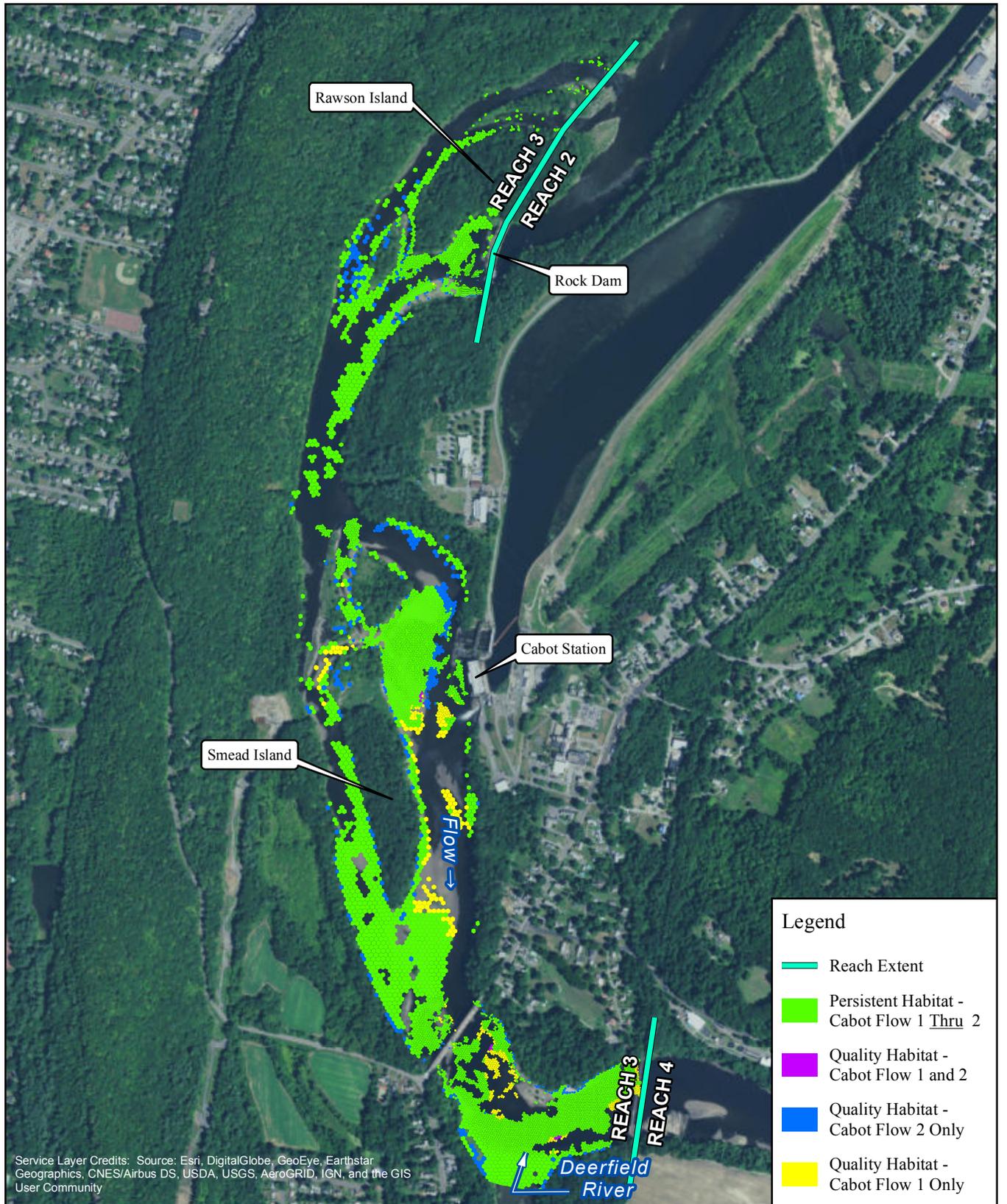
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RELICENSING STUDY 3.3.1

Persistent Habitat
Yellow Lampmussel-Adult
Bypass Flow: 3000 cfs
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Cabot Flow 2: 9000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



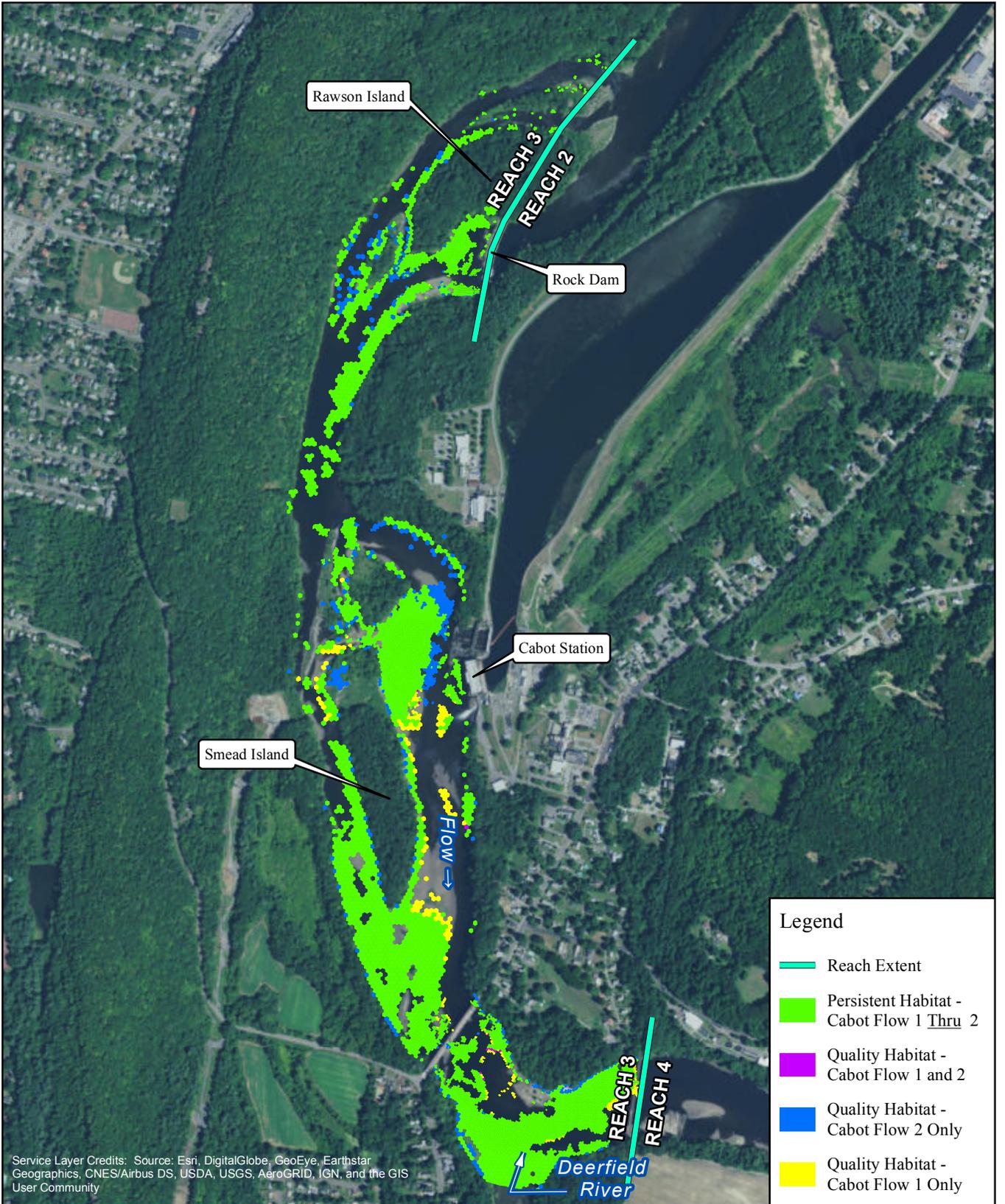
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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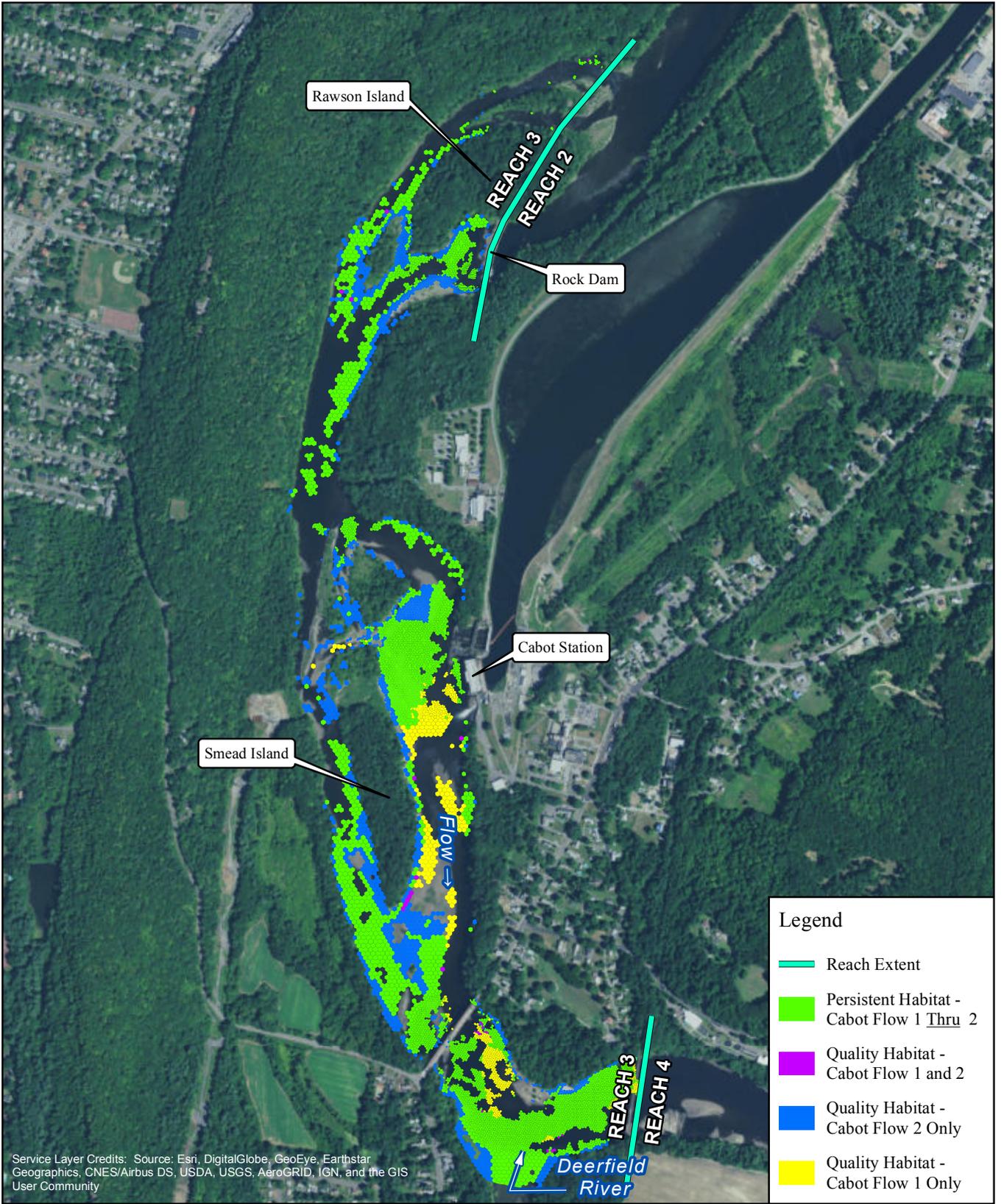
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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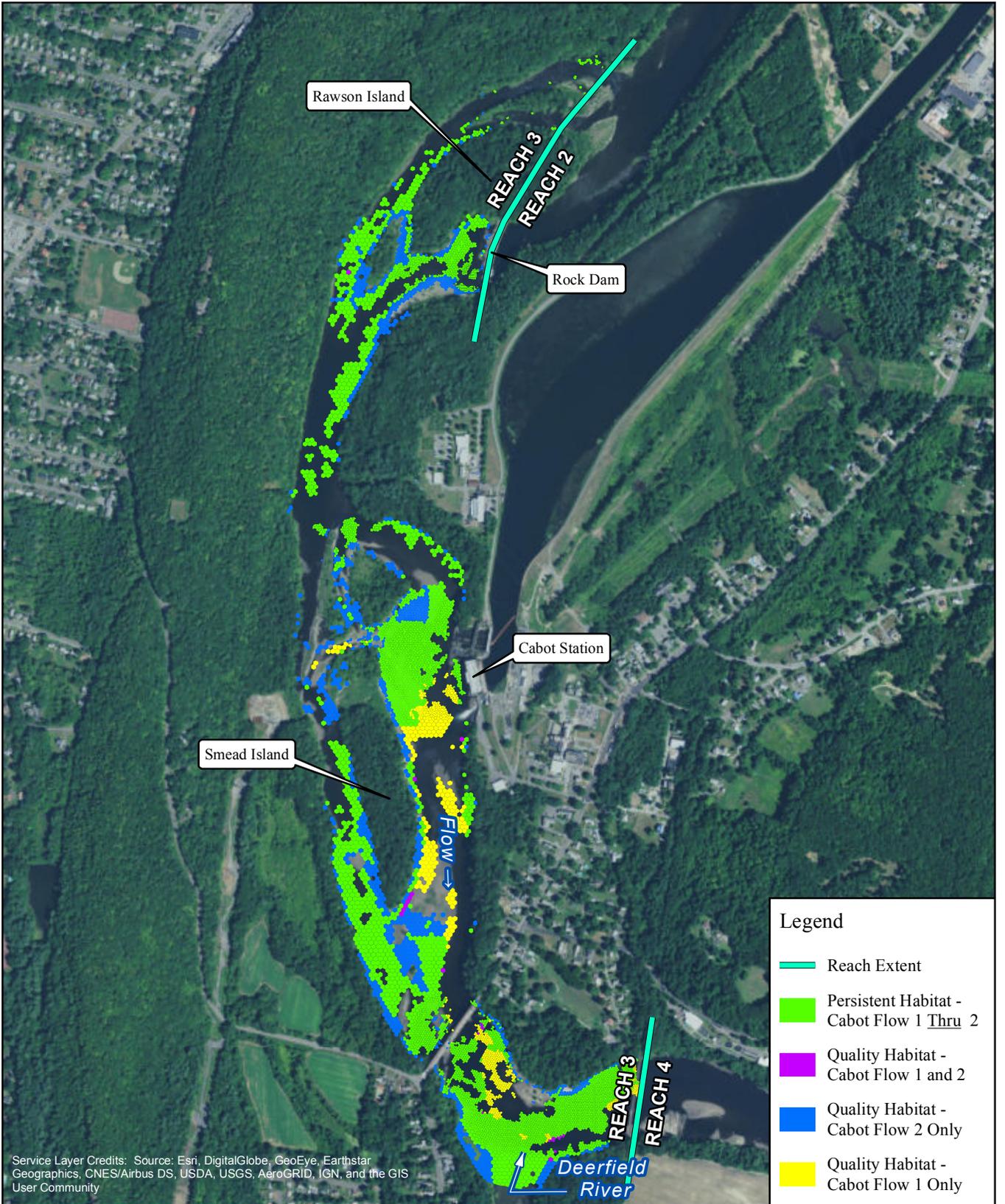
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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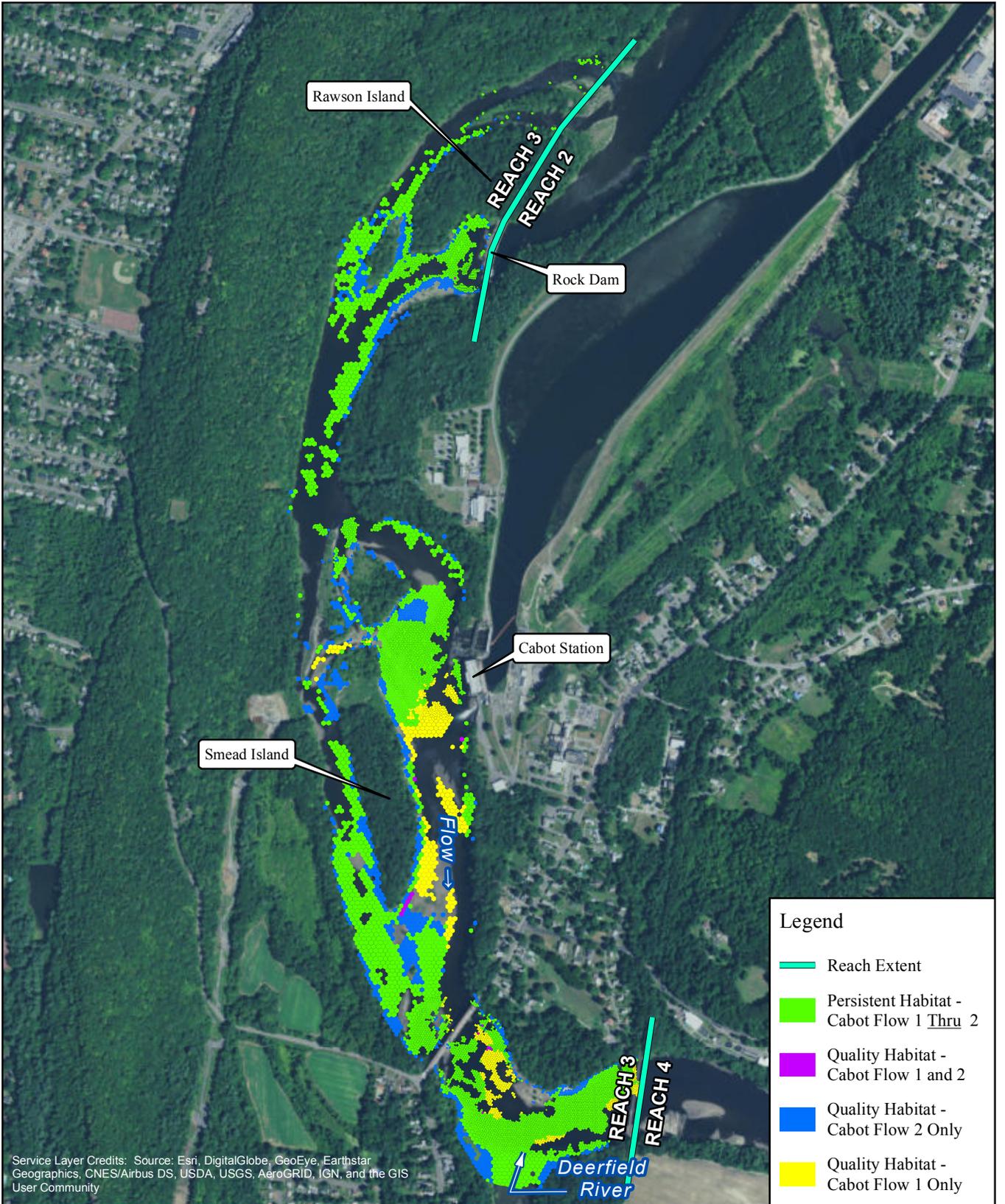
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 500 cfs
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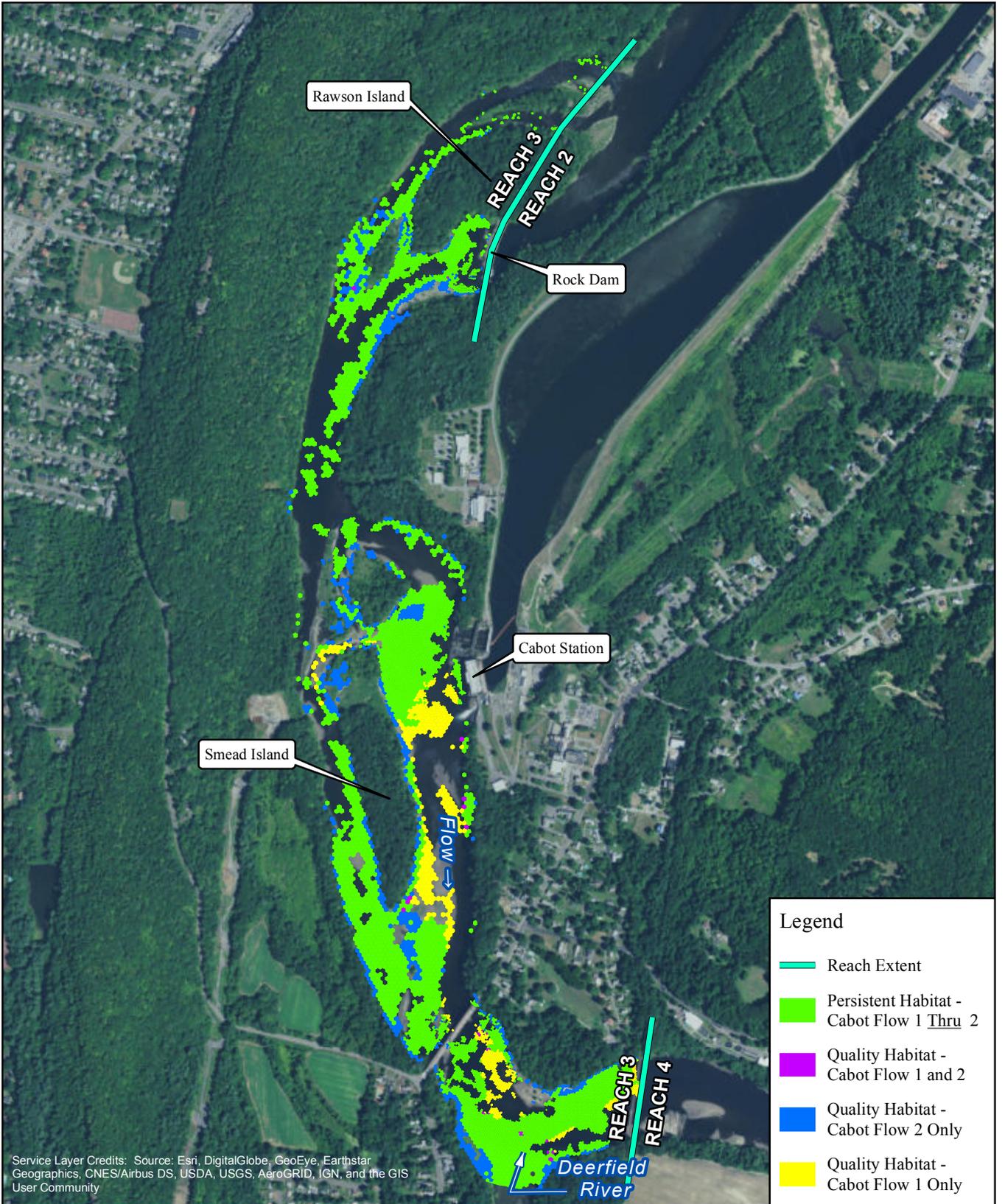
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RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 1000 cfs
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0 500 1,000 2,000 Feet

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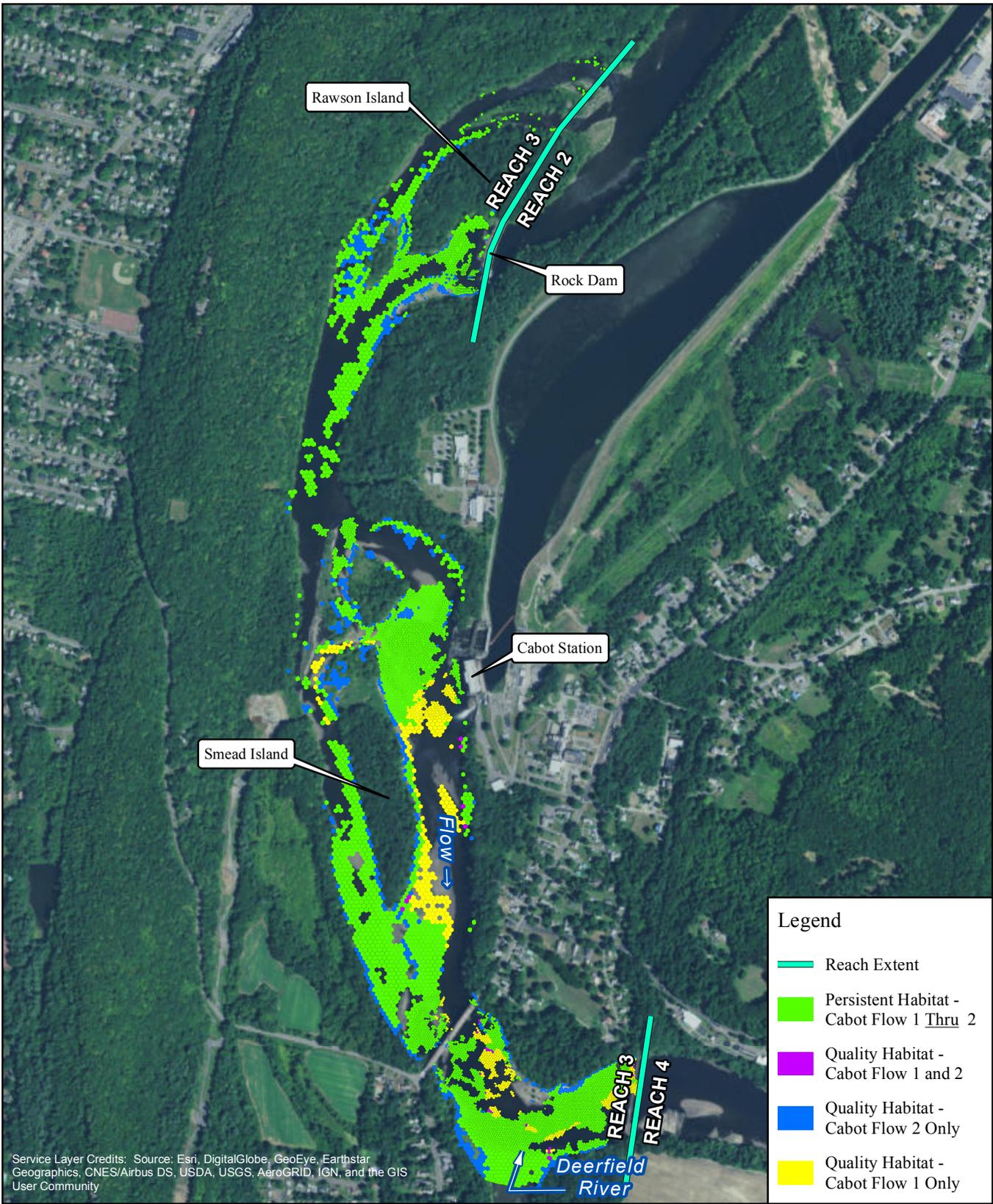
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 2000 cfs
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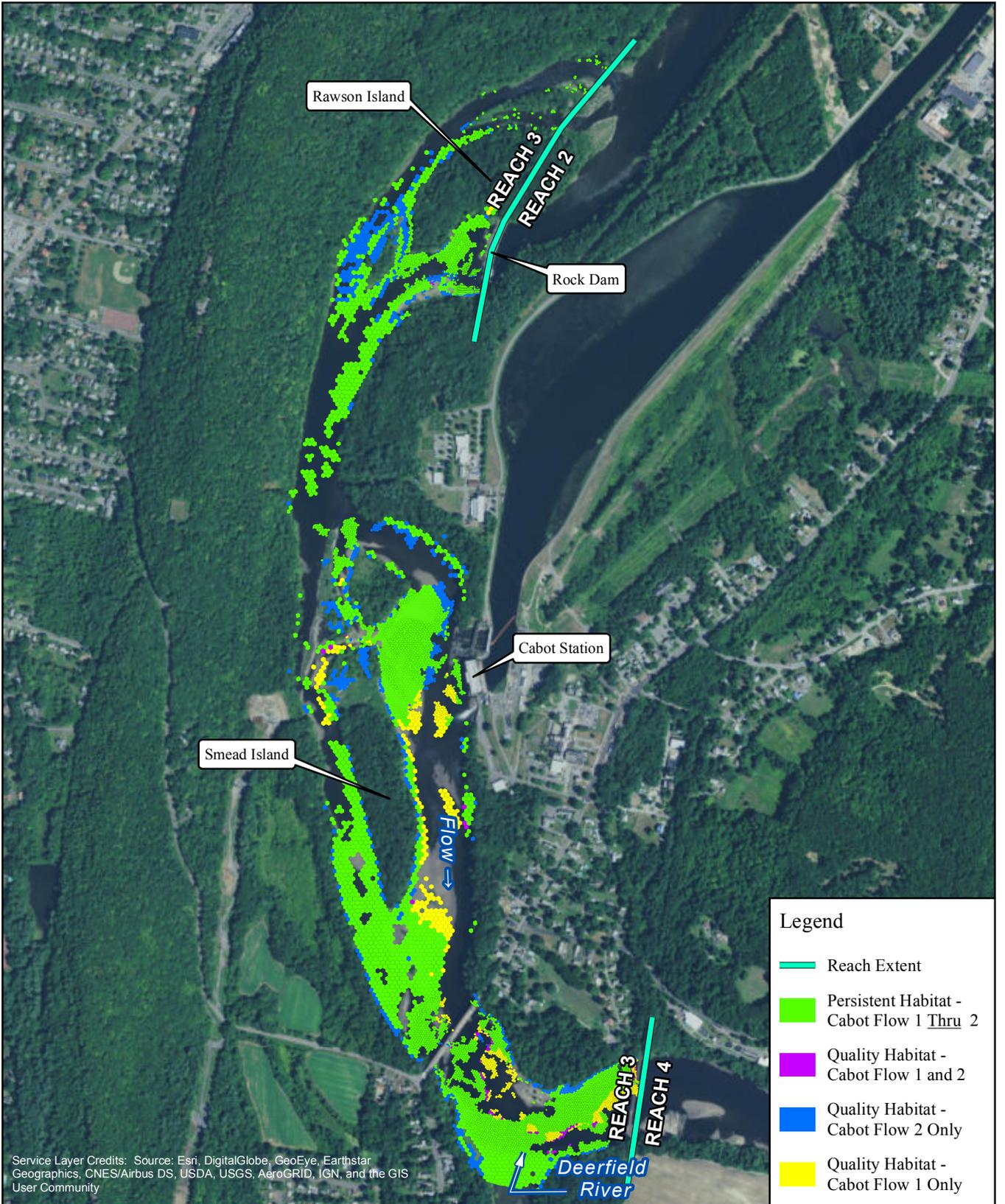
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 5000 cfs
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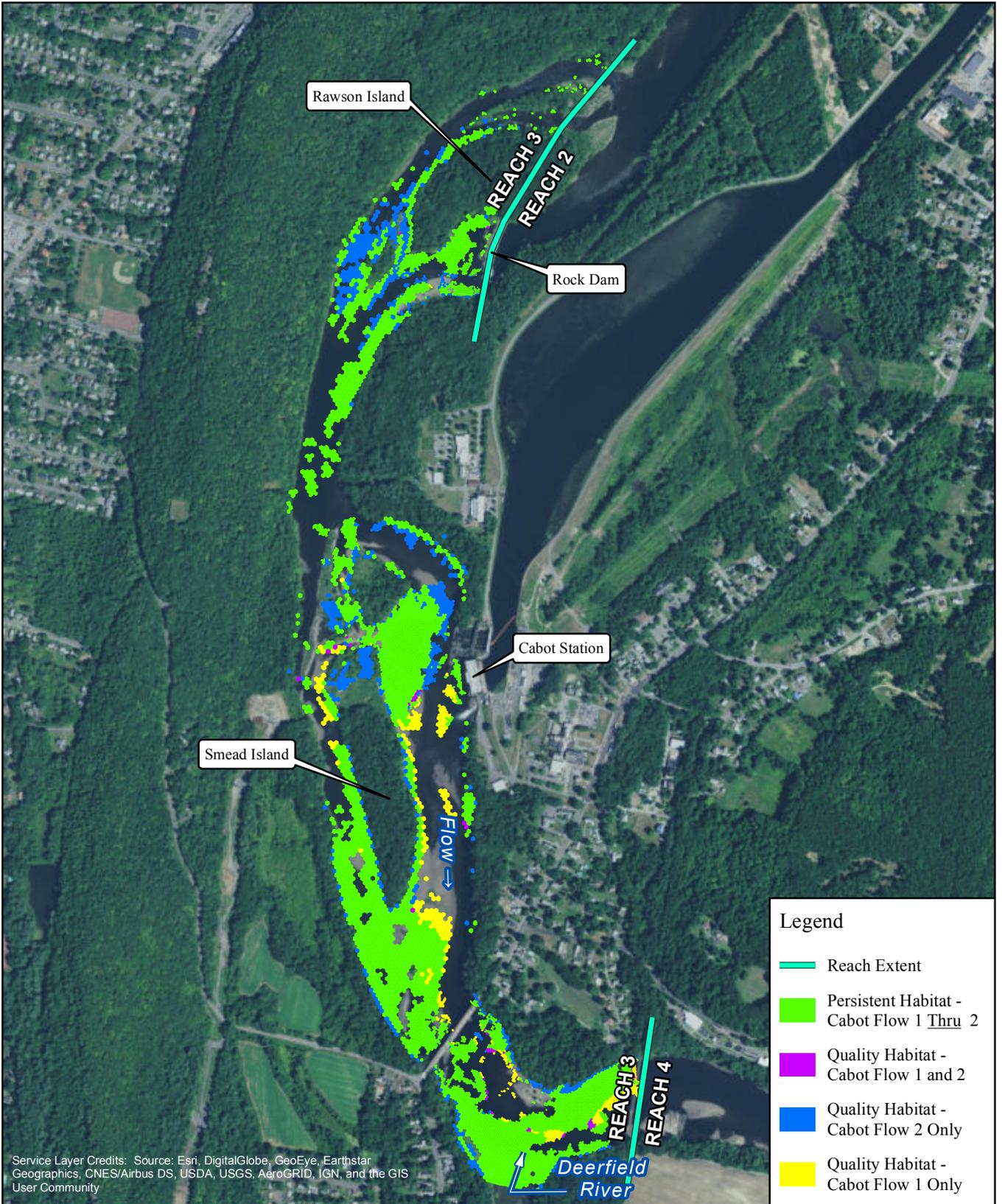
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Feet

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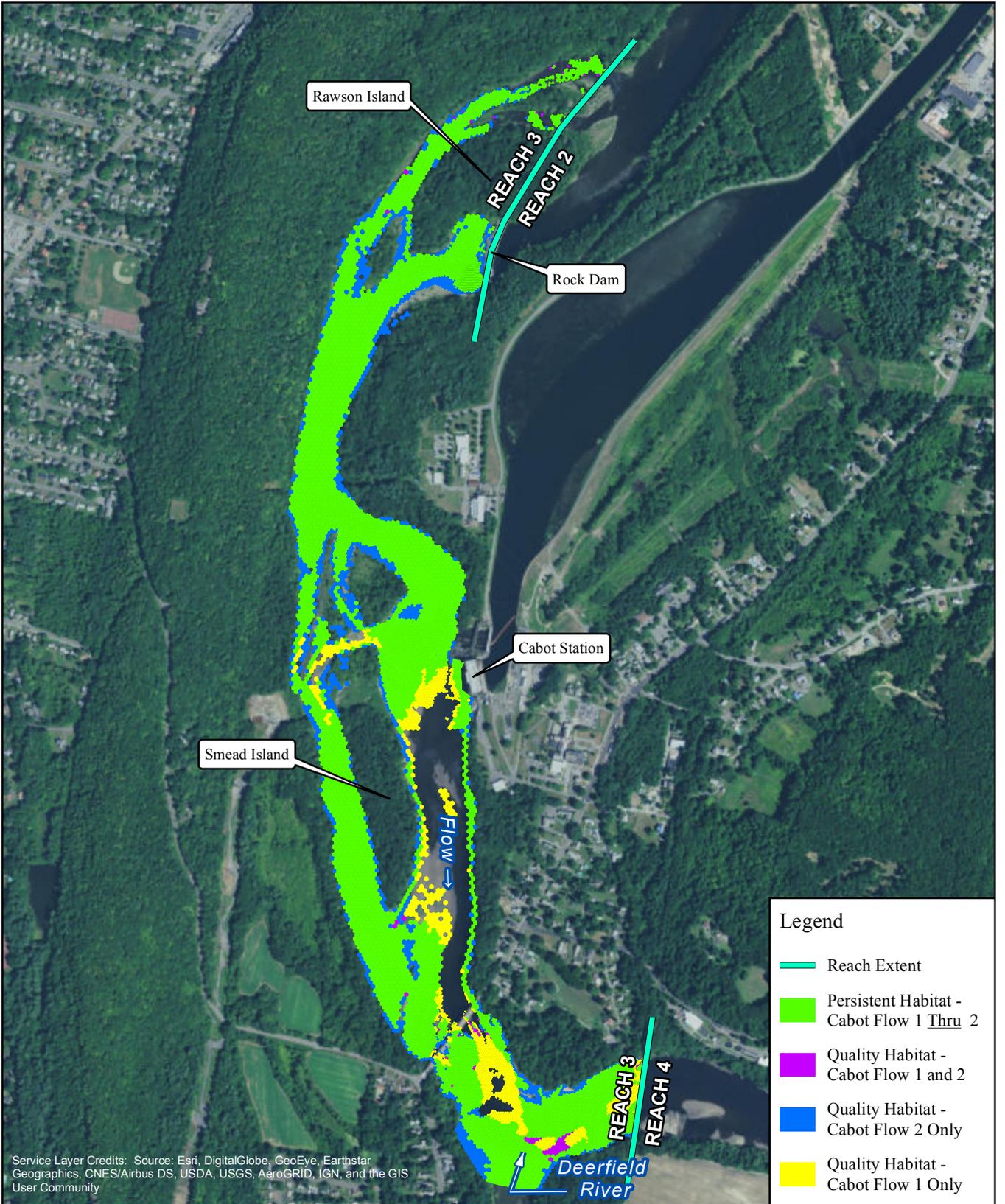
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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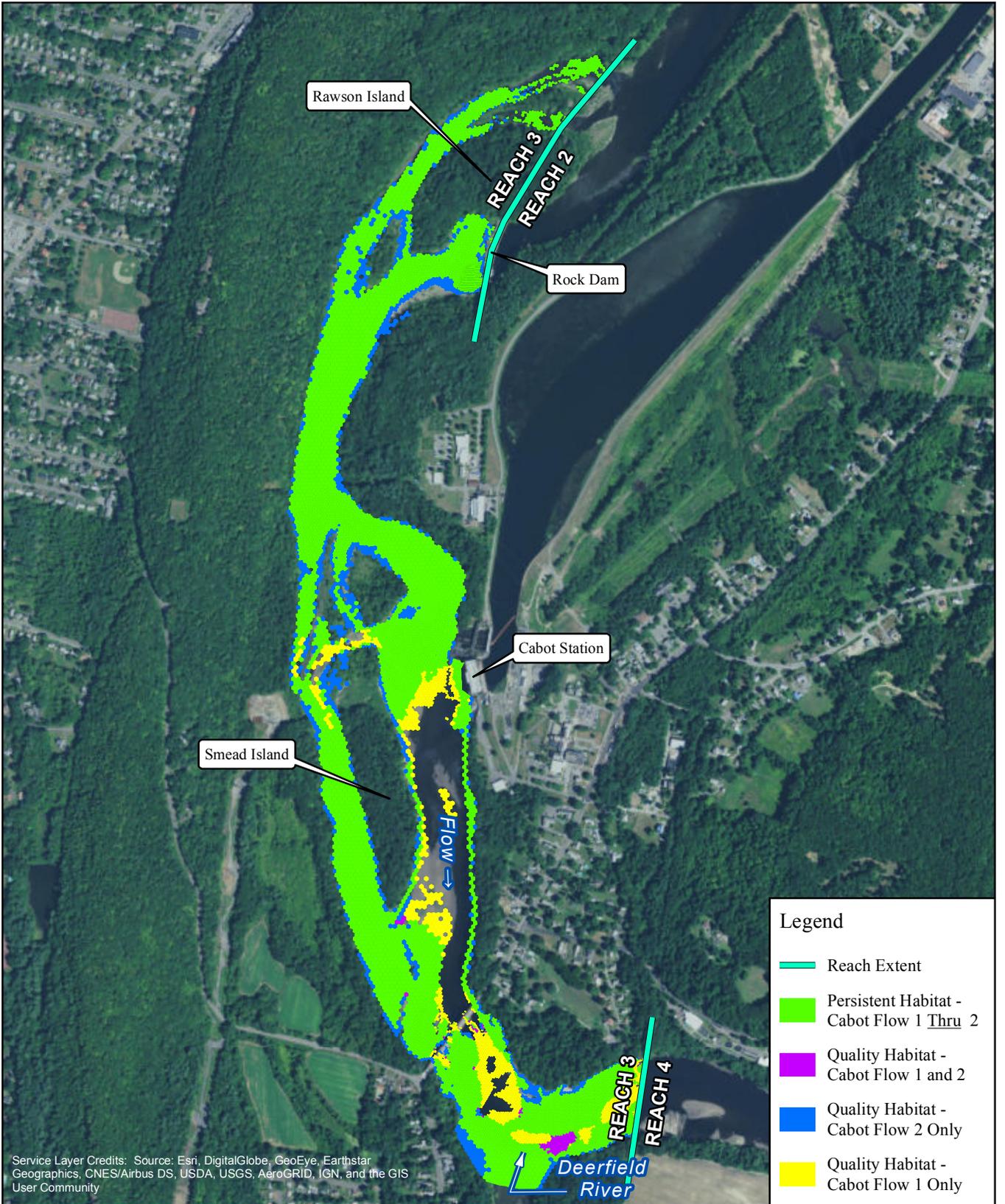
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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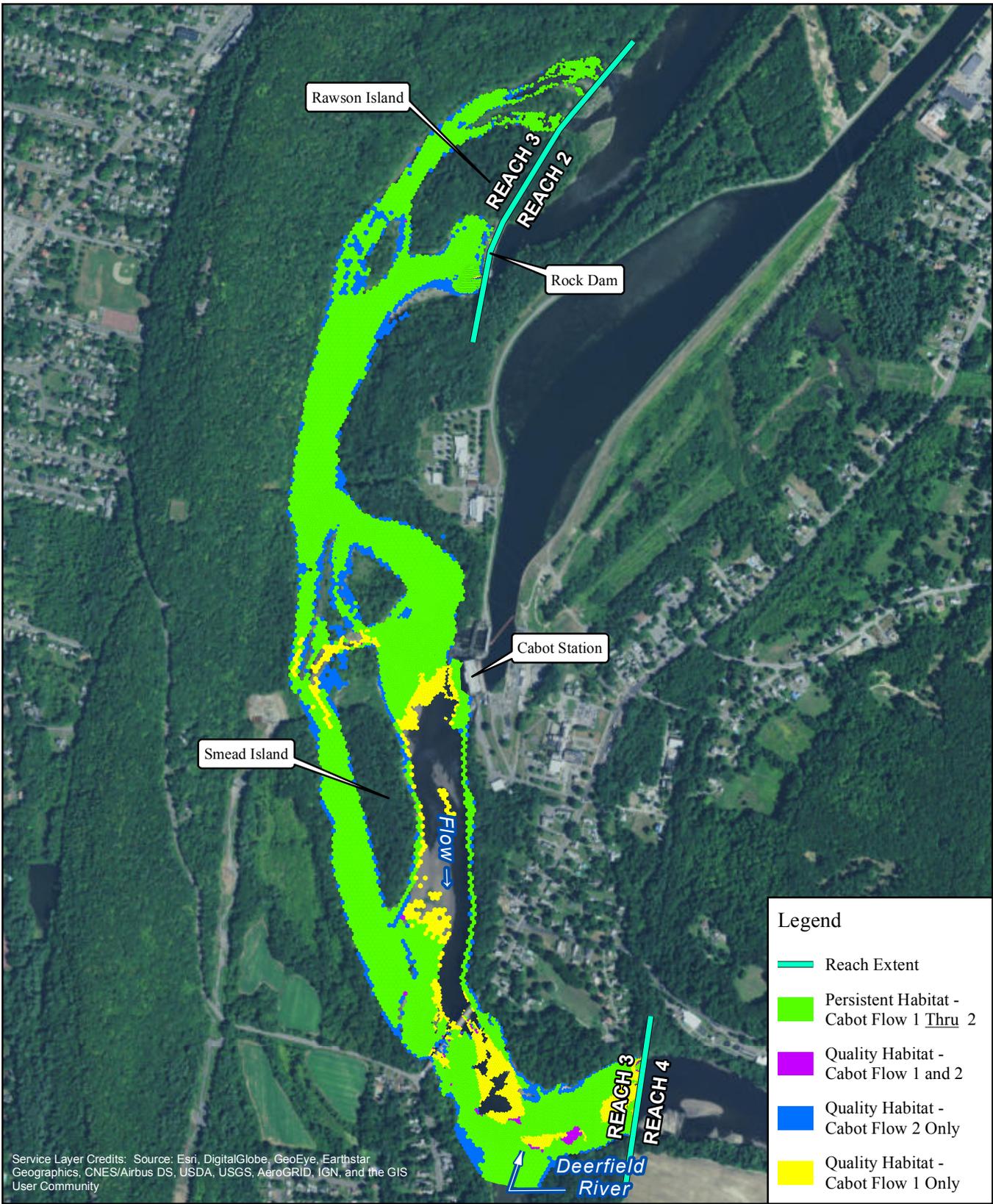
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Persistent Habitat
 Yellow Lampmussel-Adult
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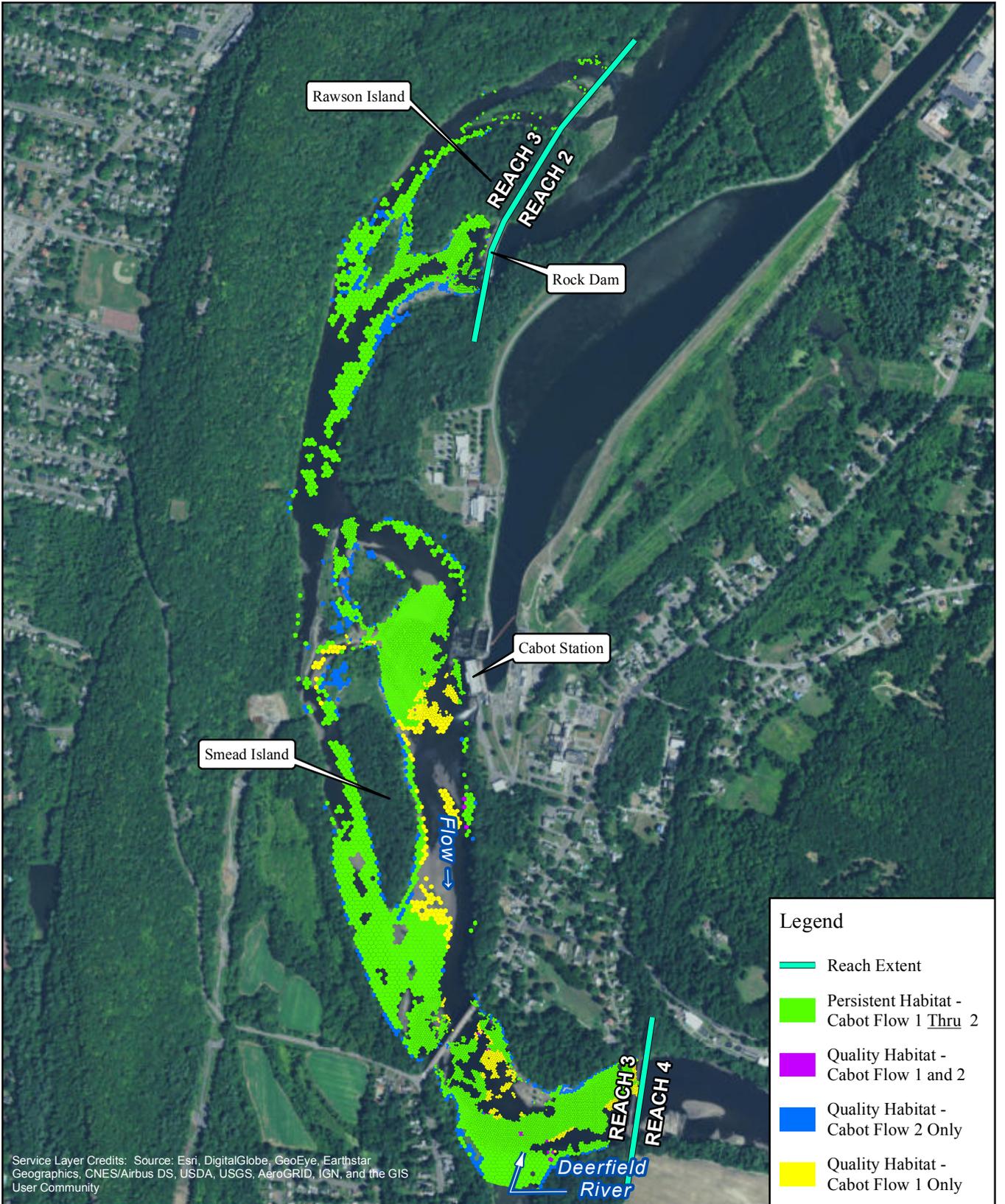
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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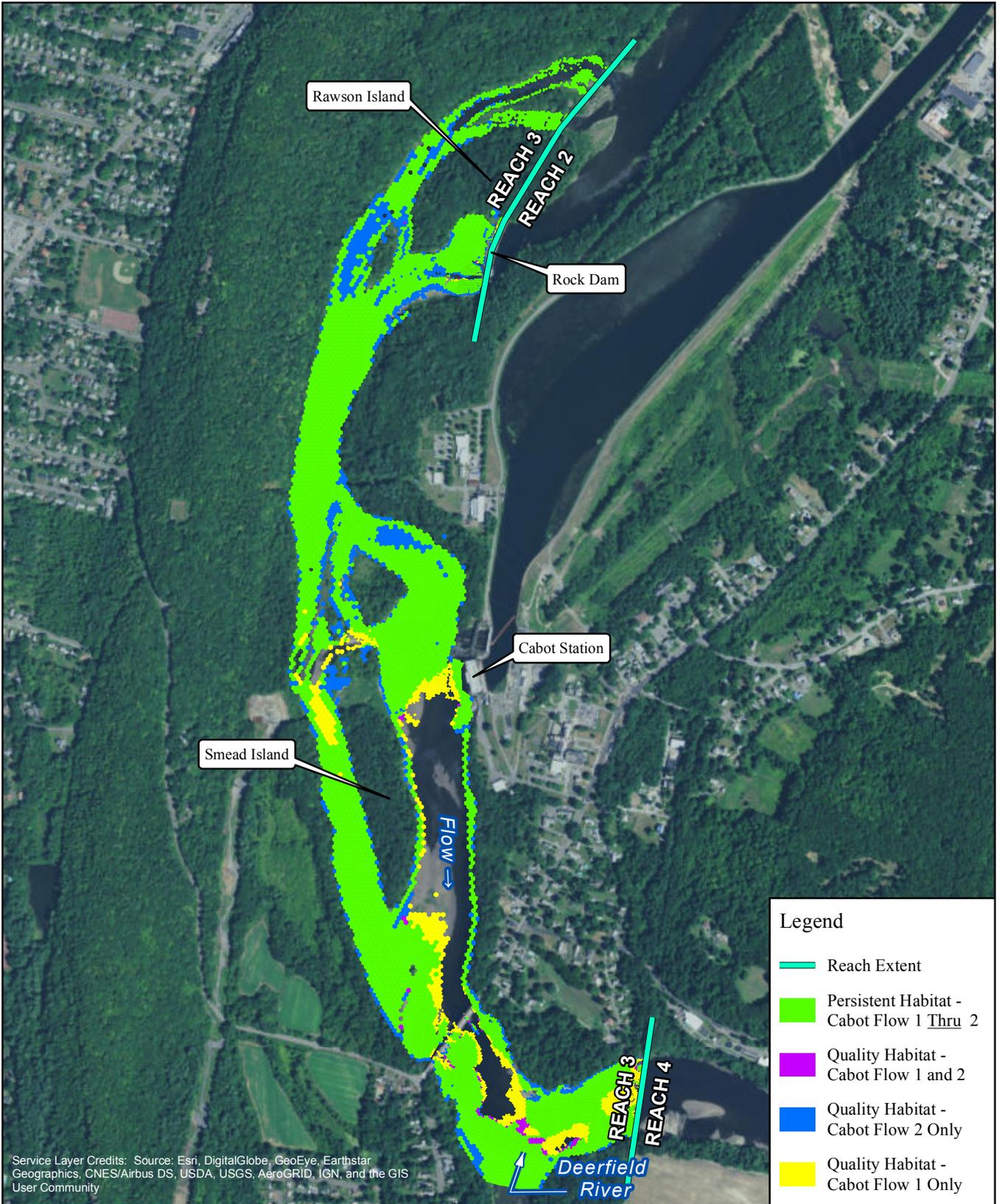
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Persistent Habitat
 Yellow Lampmussel-Adult
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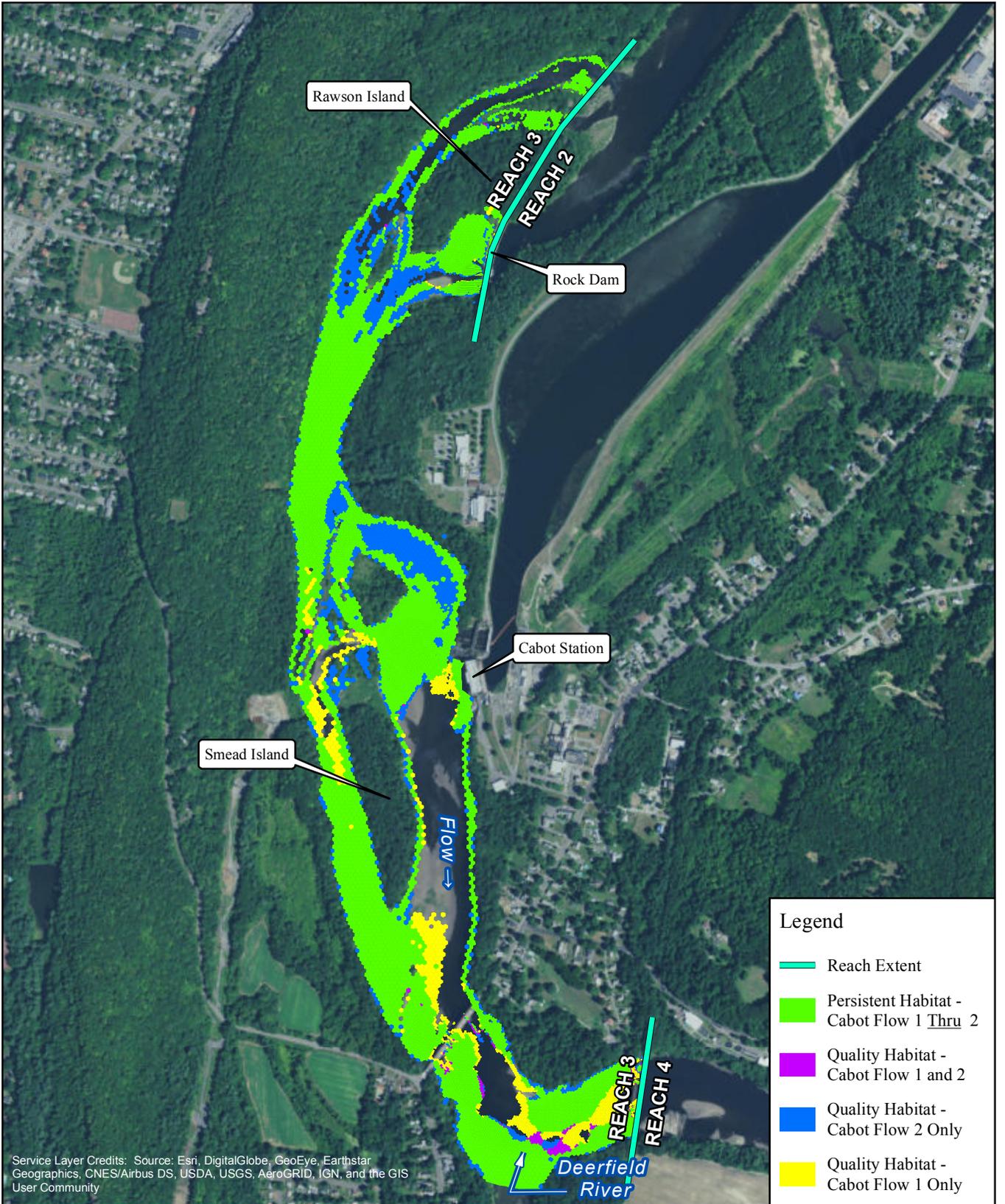
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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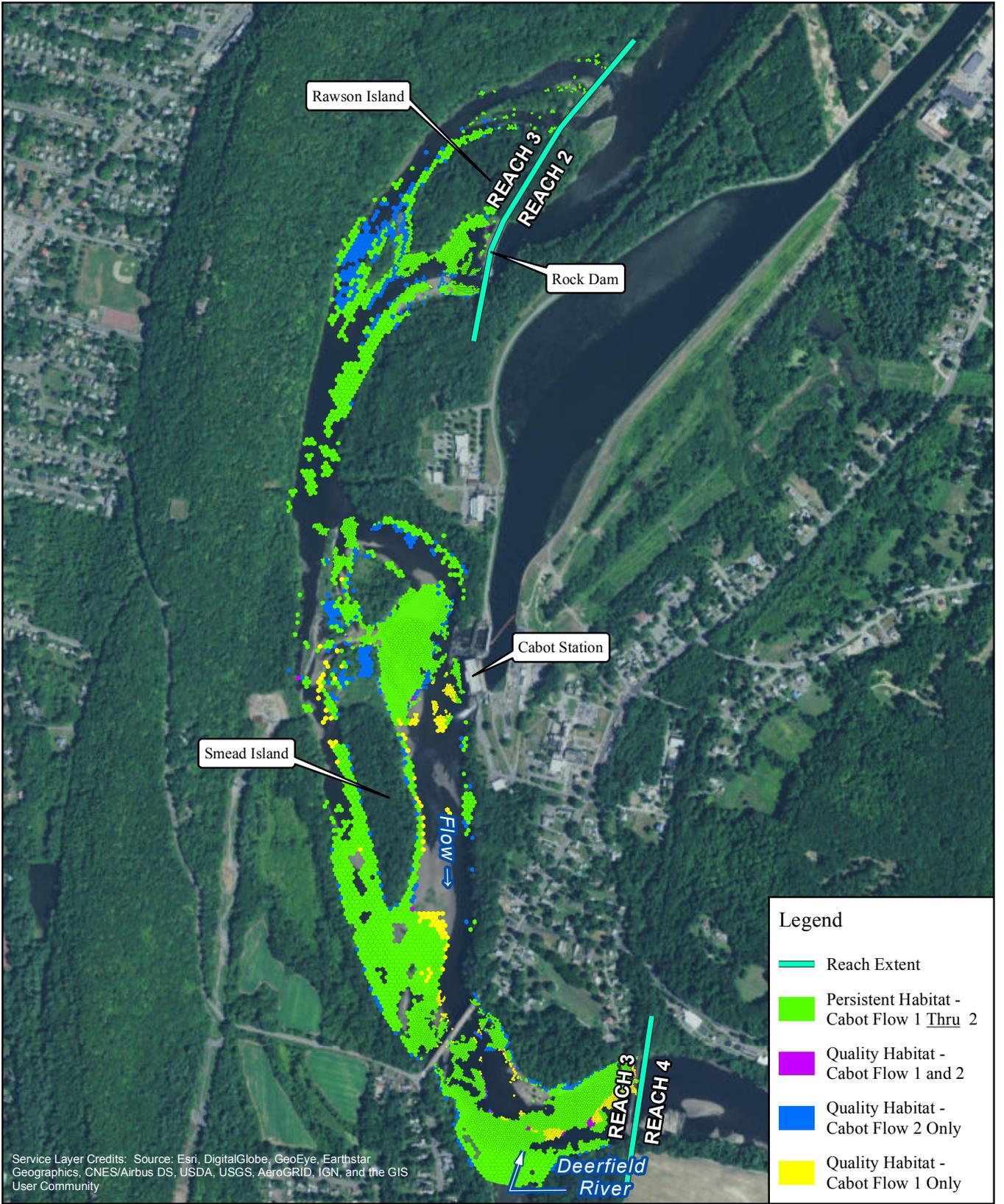
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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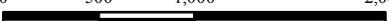
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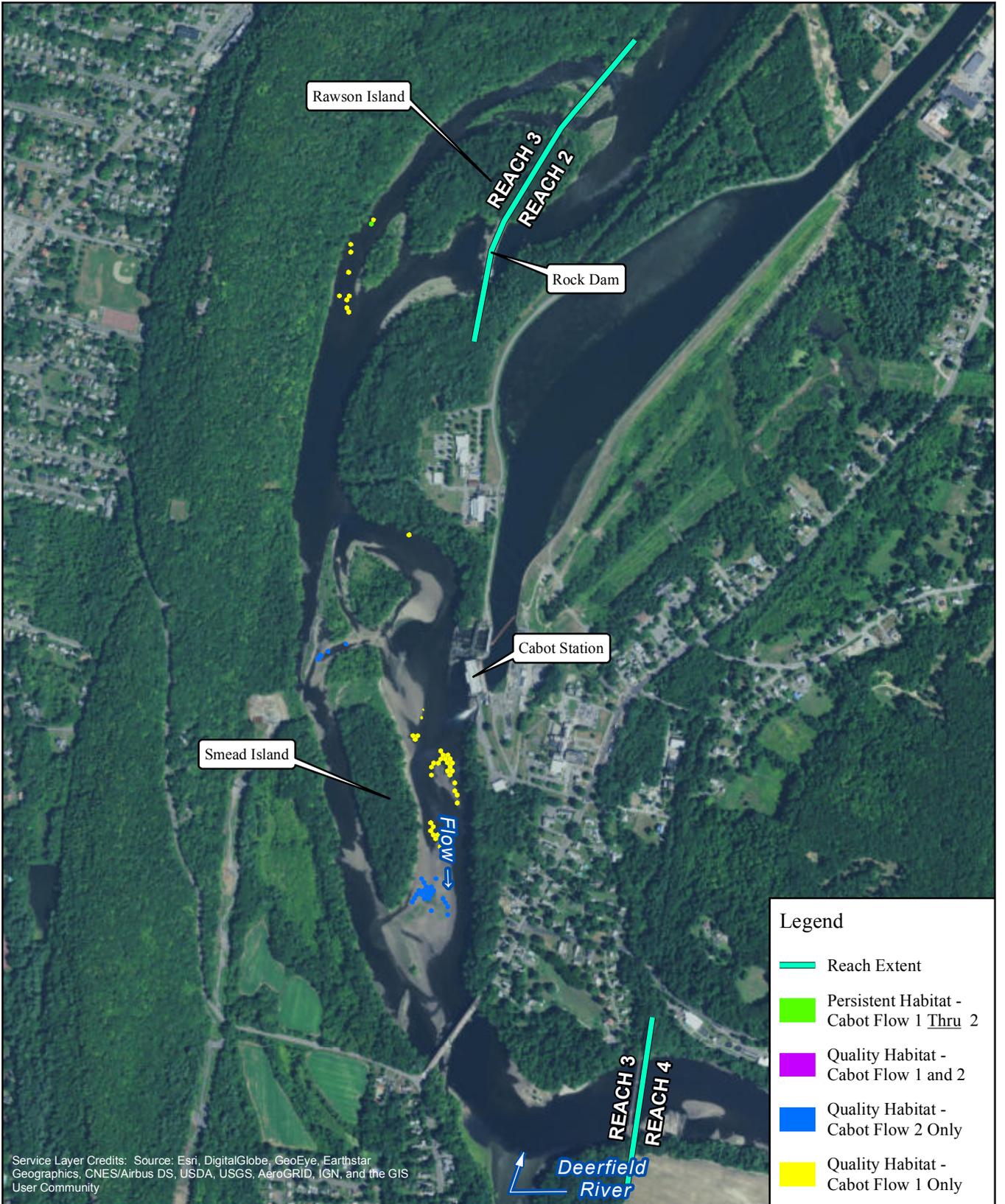
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Yellow Lampmussel-Adult
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet



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Legend

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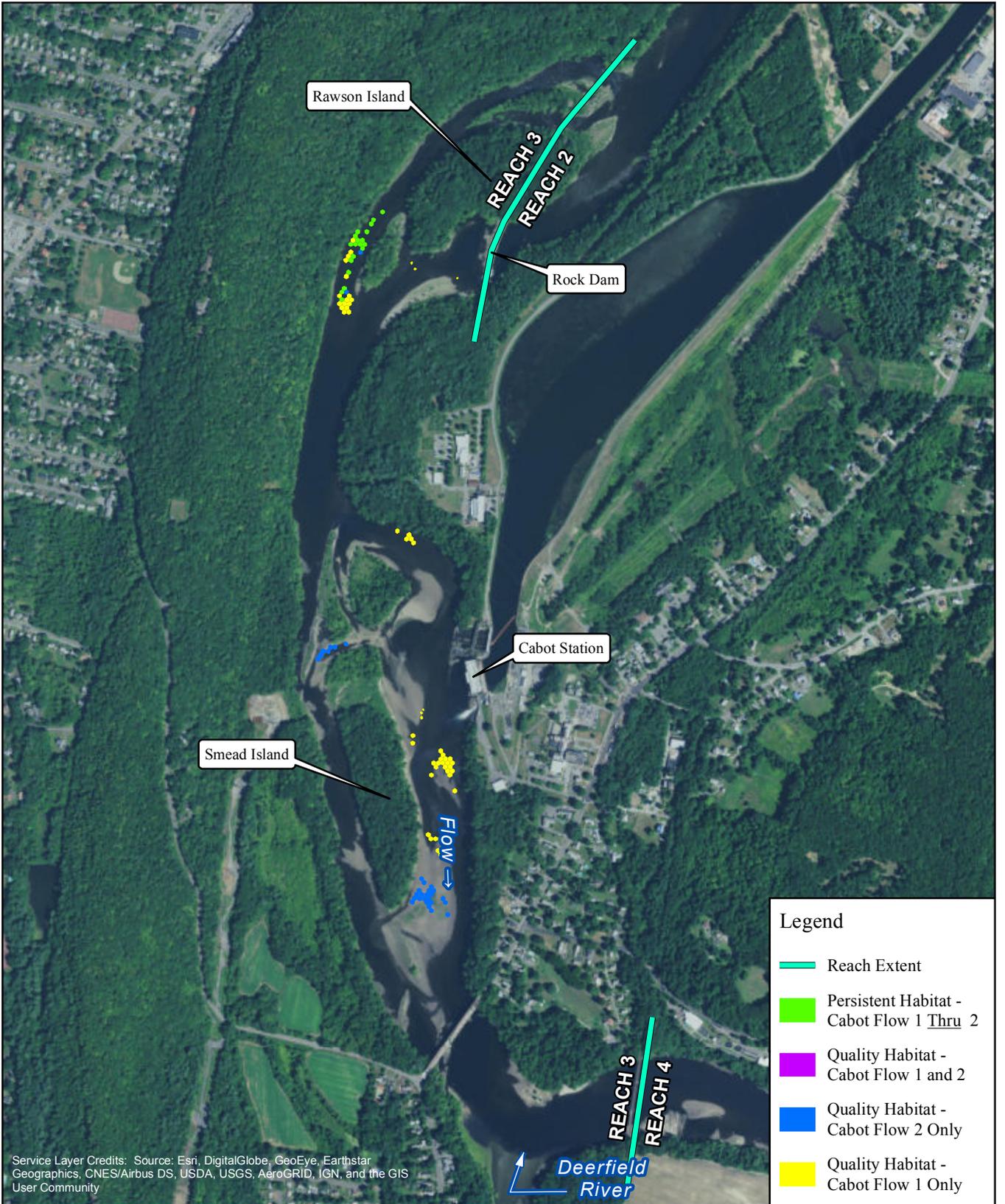
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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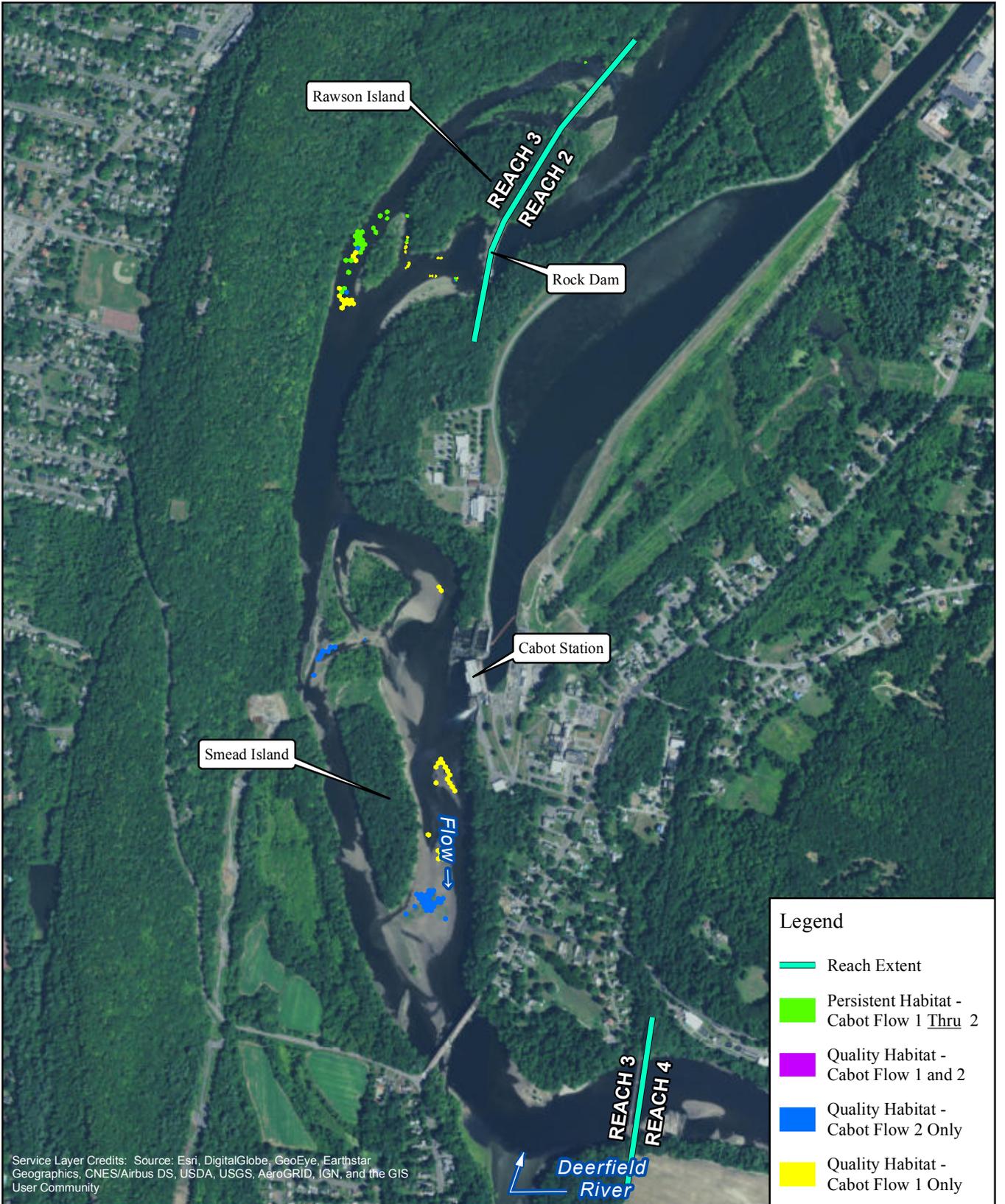
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Persistent Habitat
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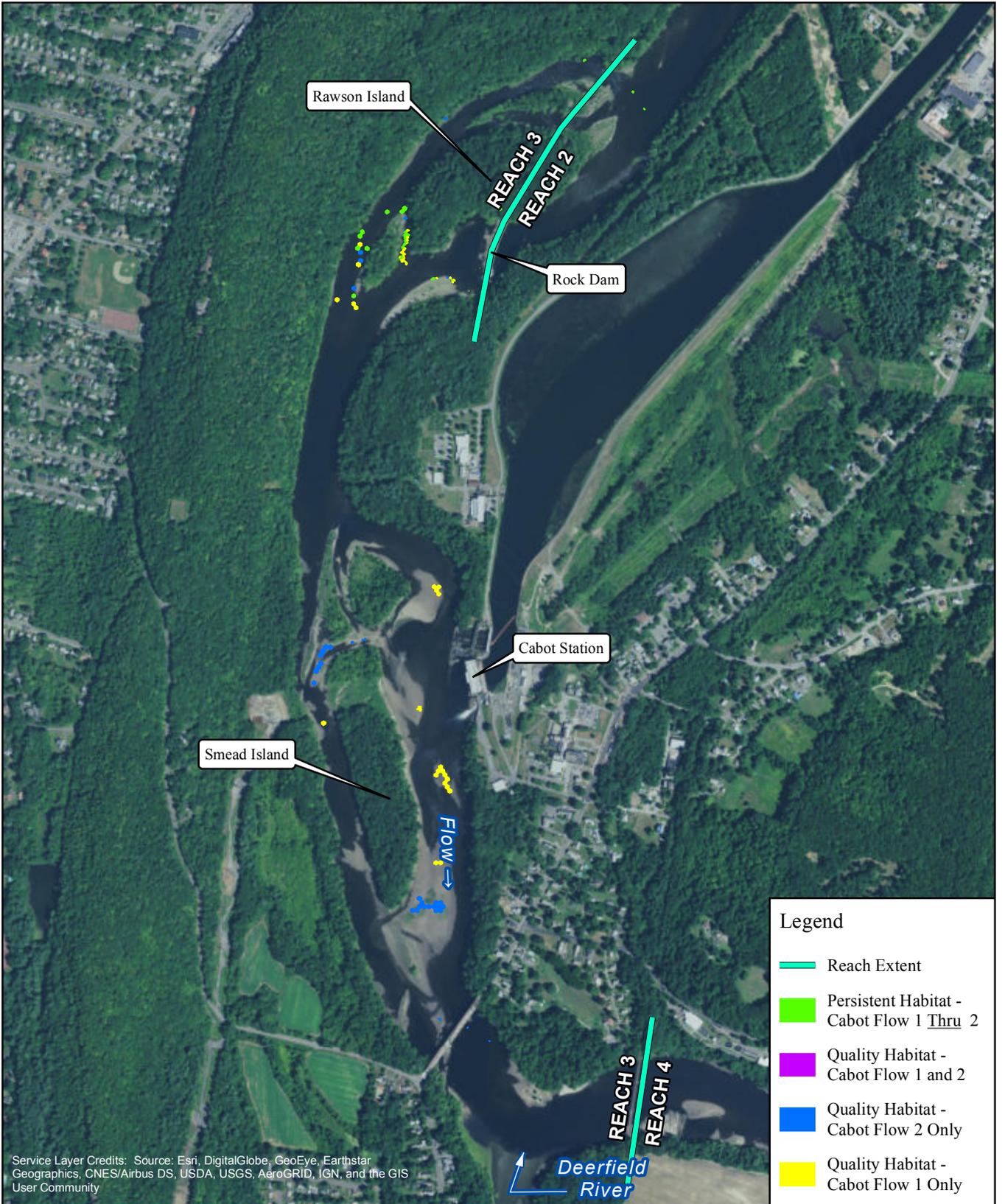
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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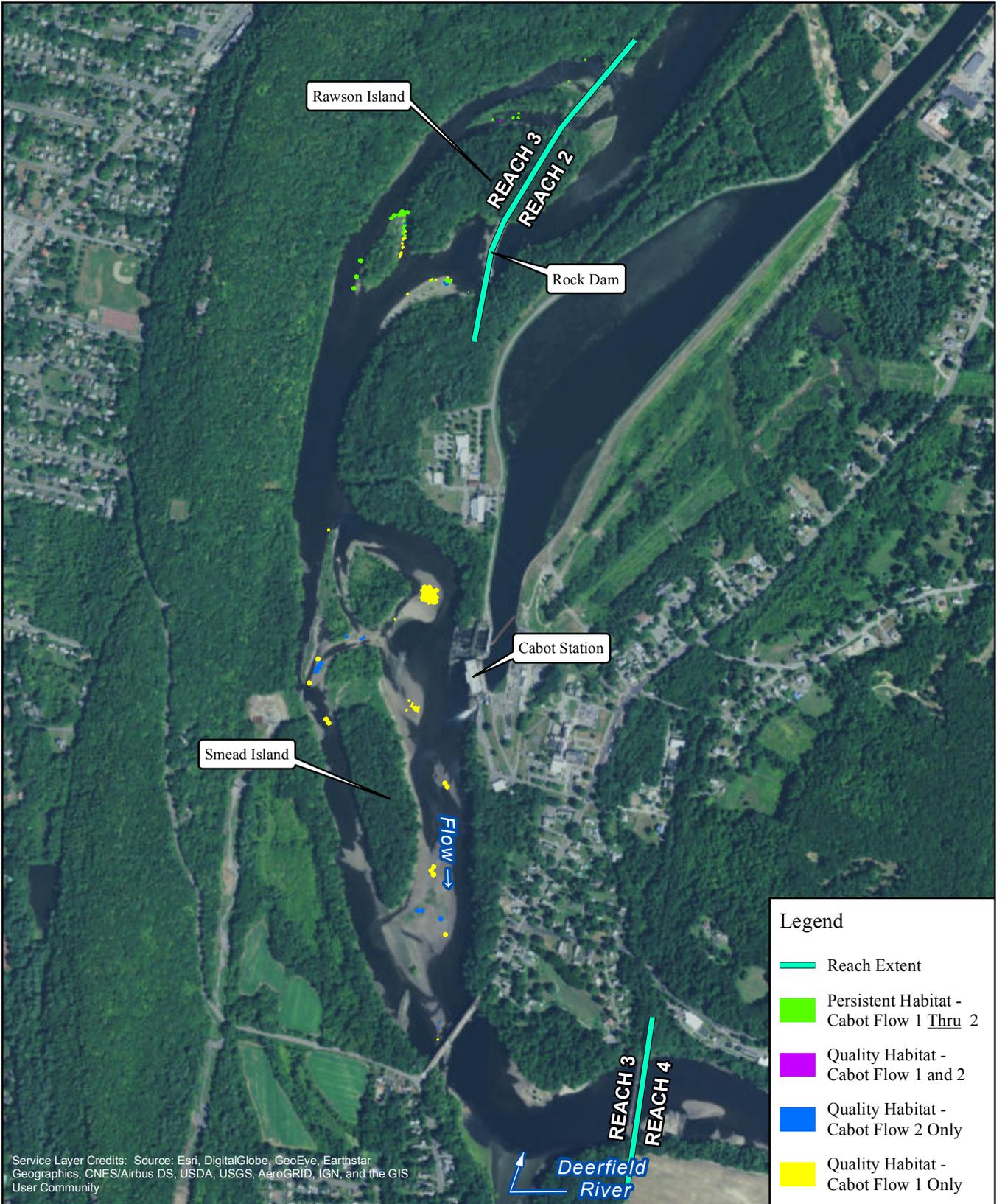
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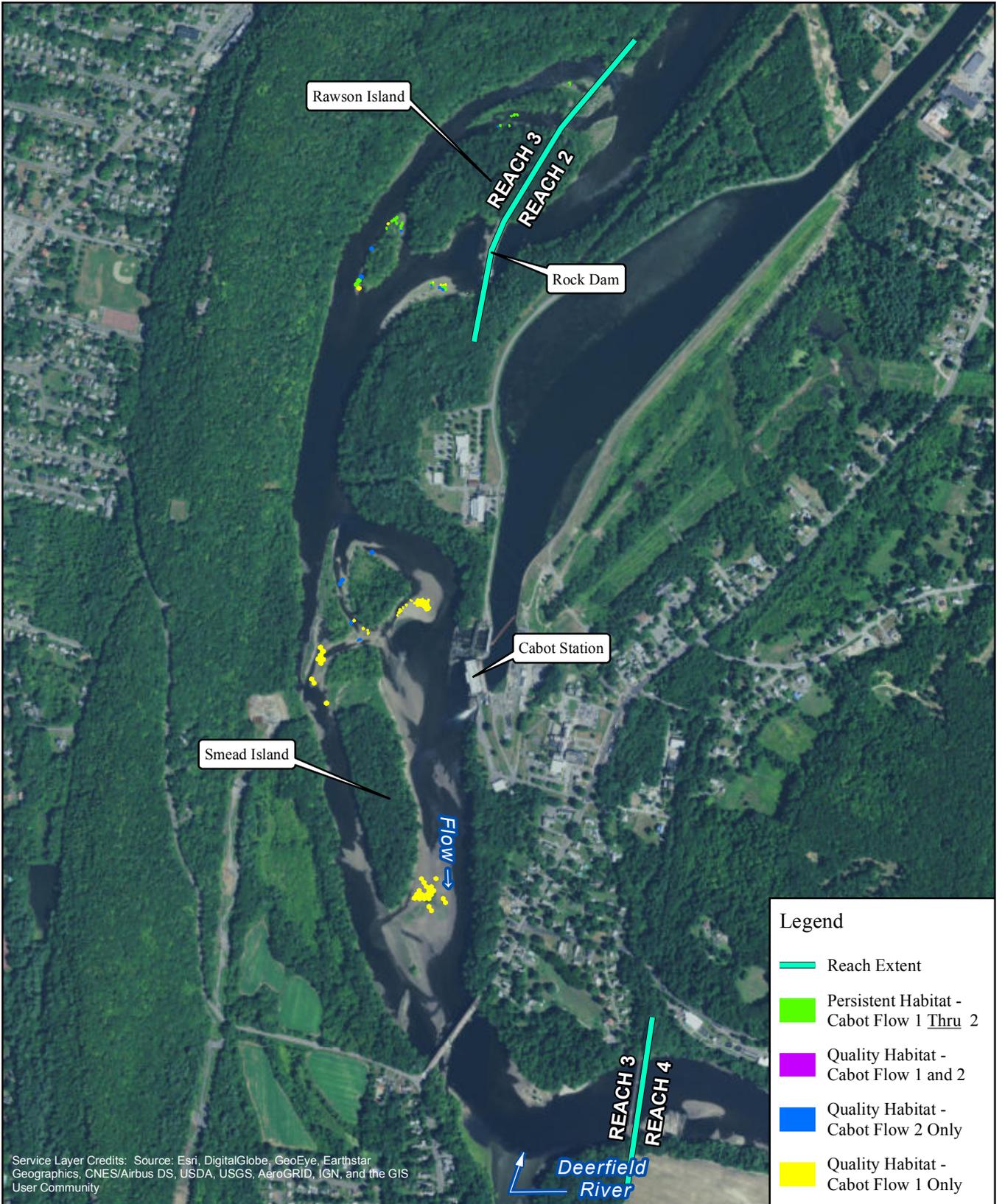
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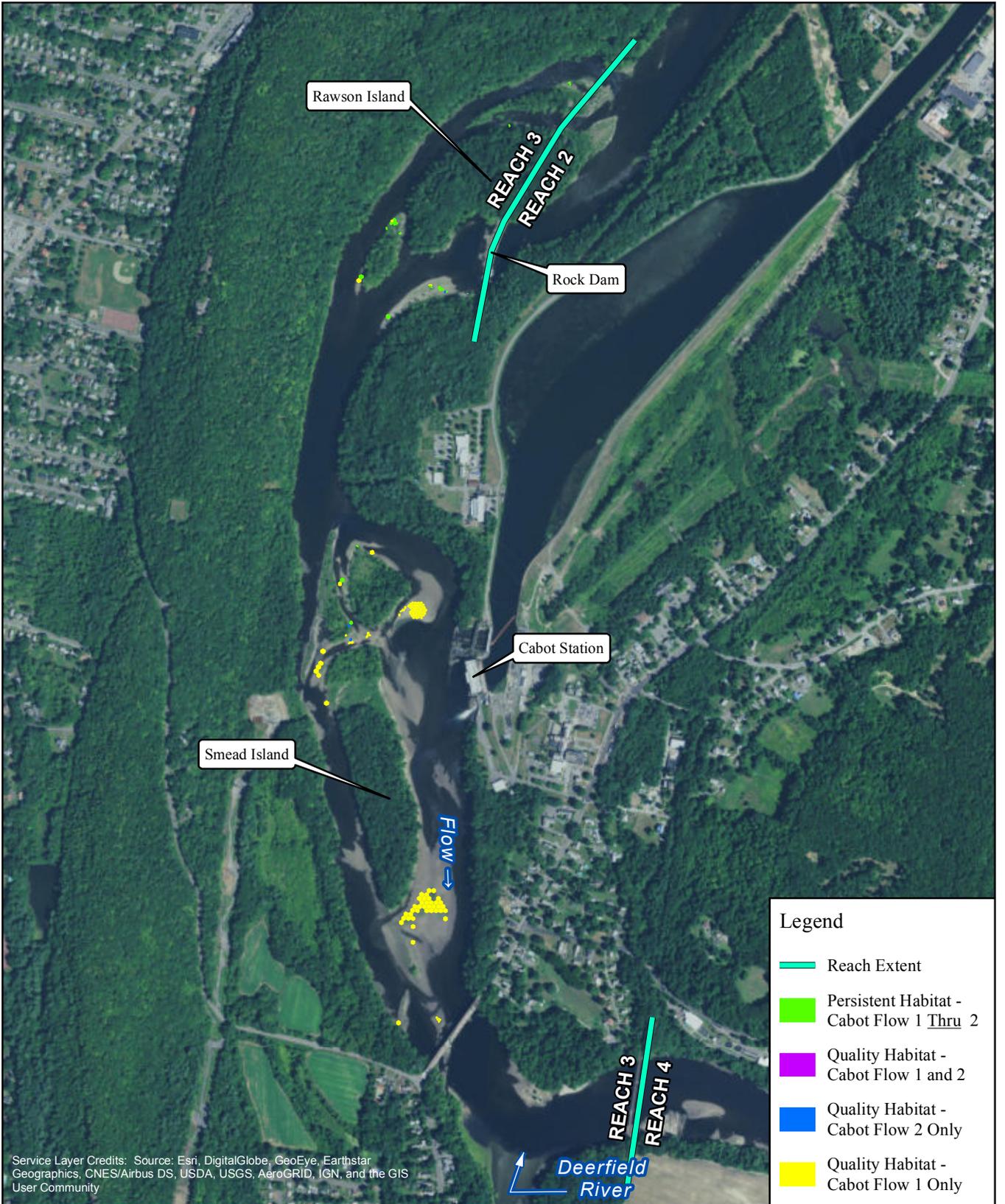
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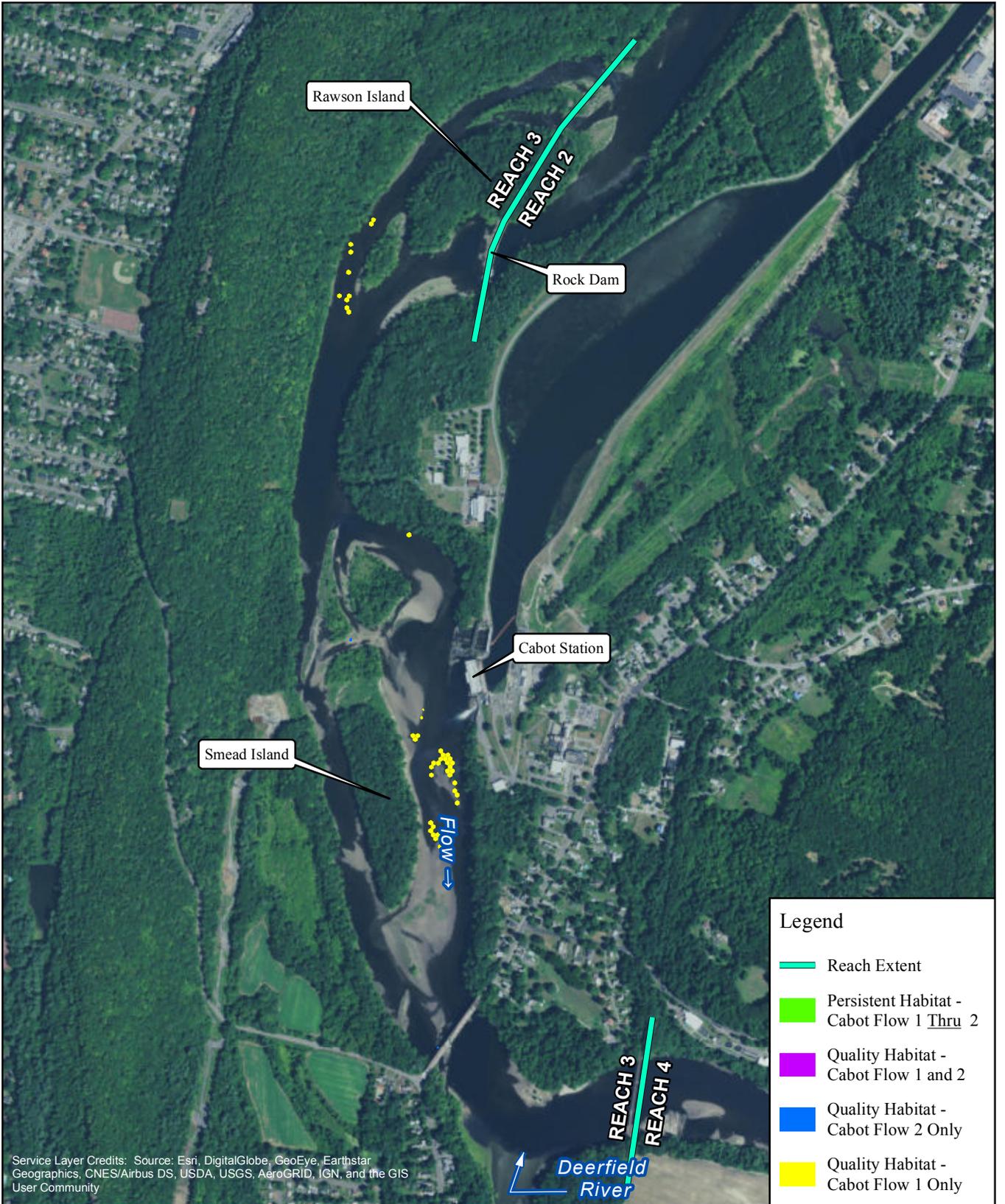
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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 2500 cfs
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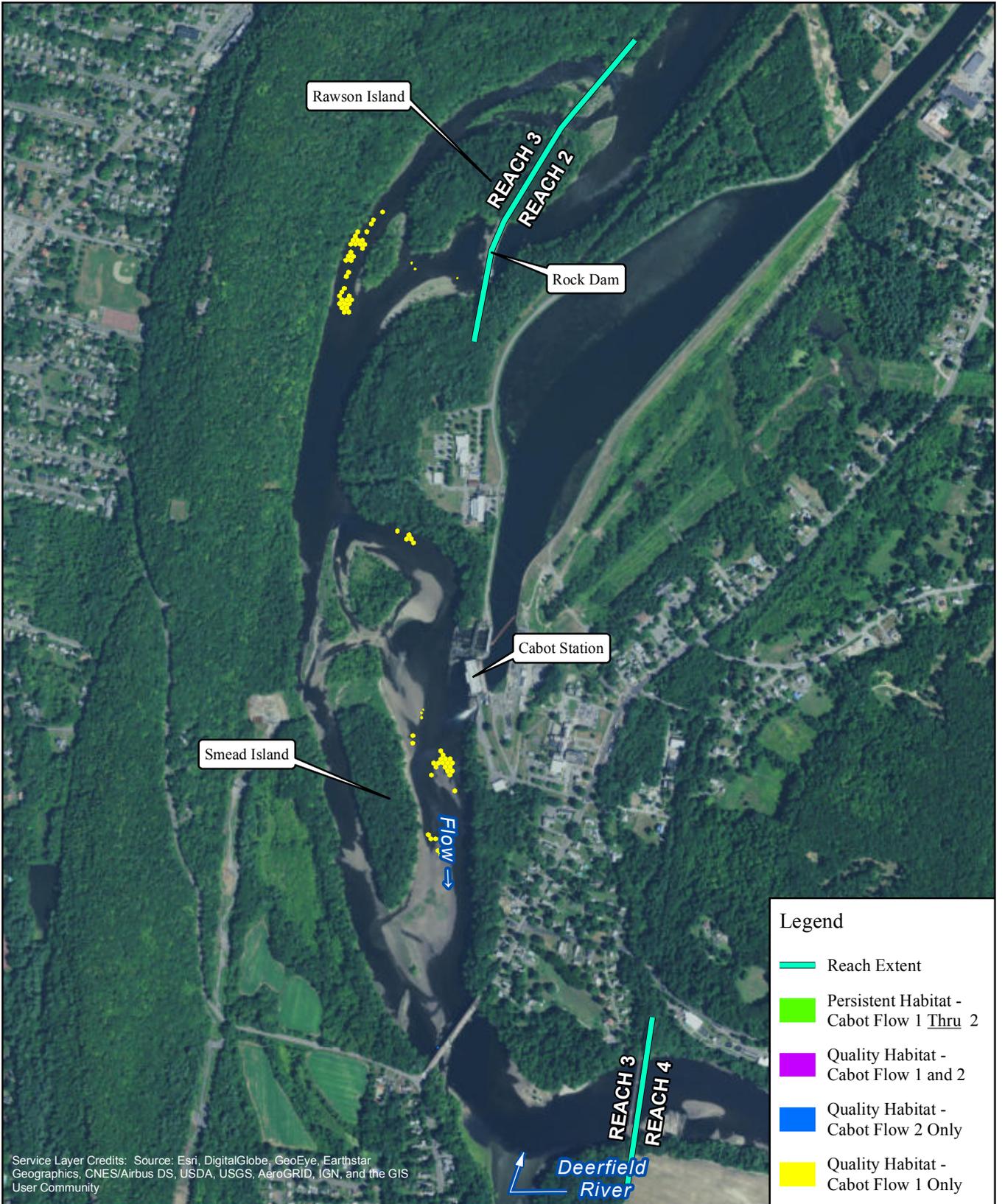
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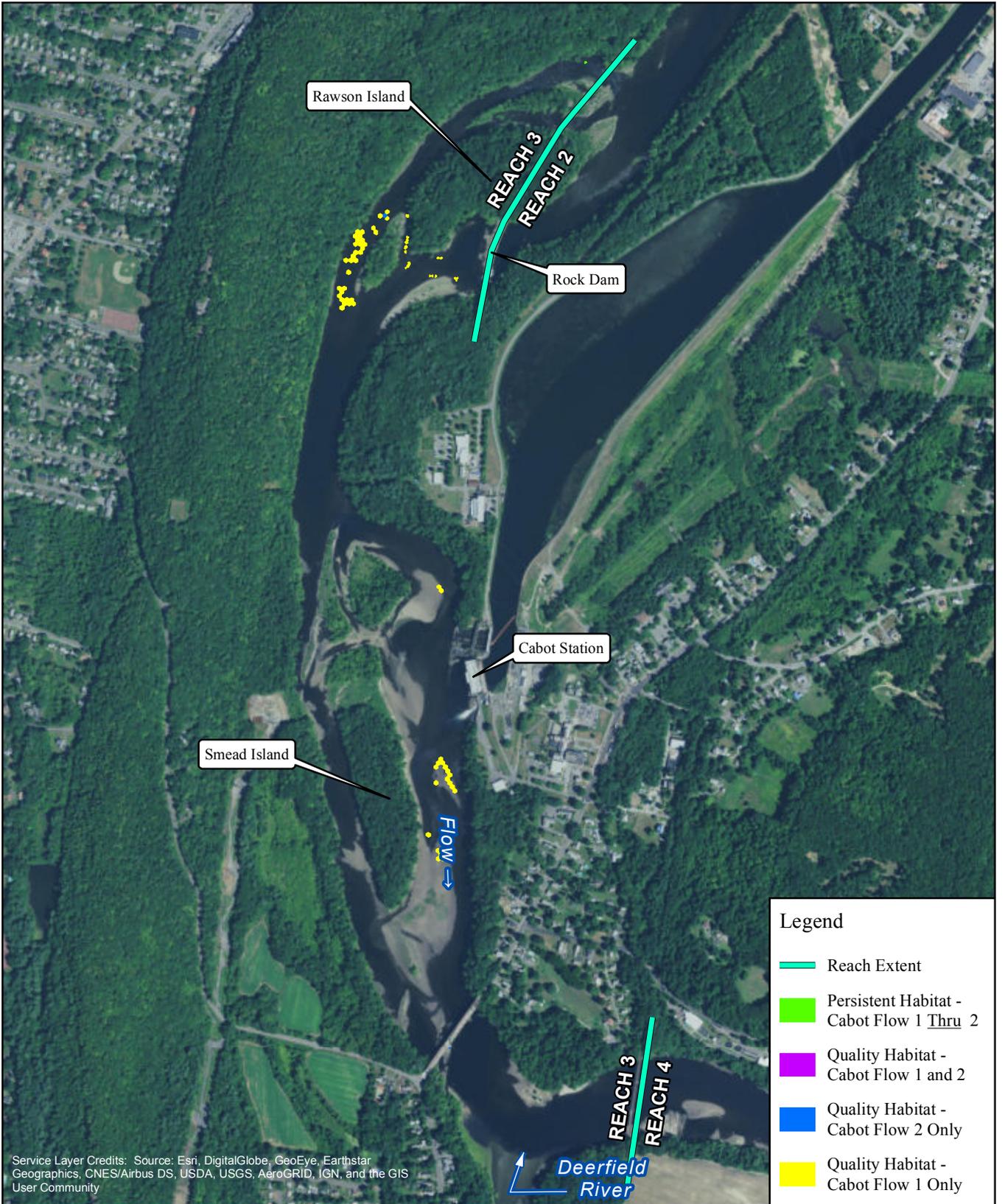
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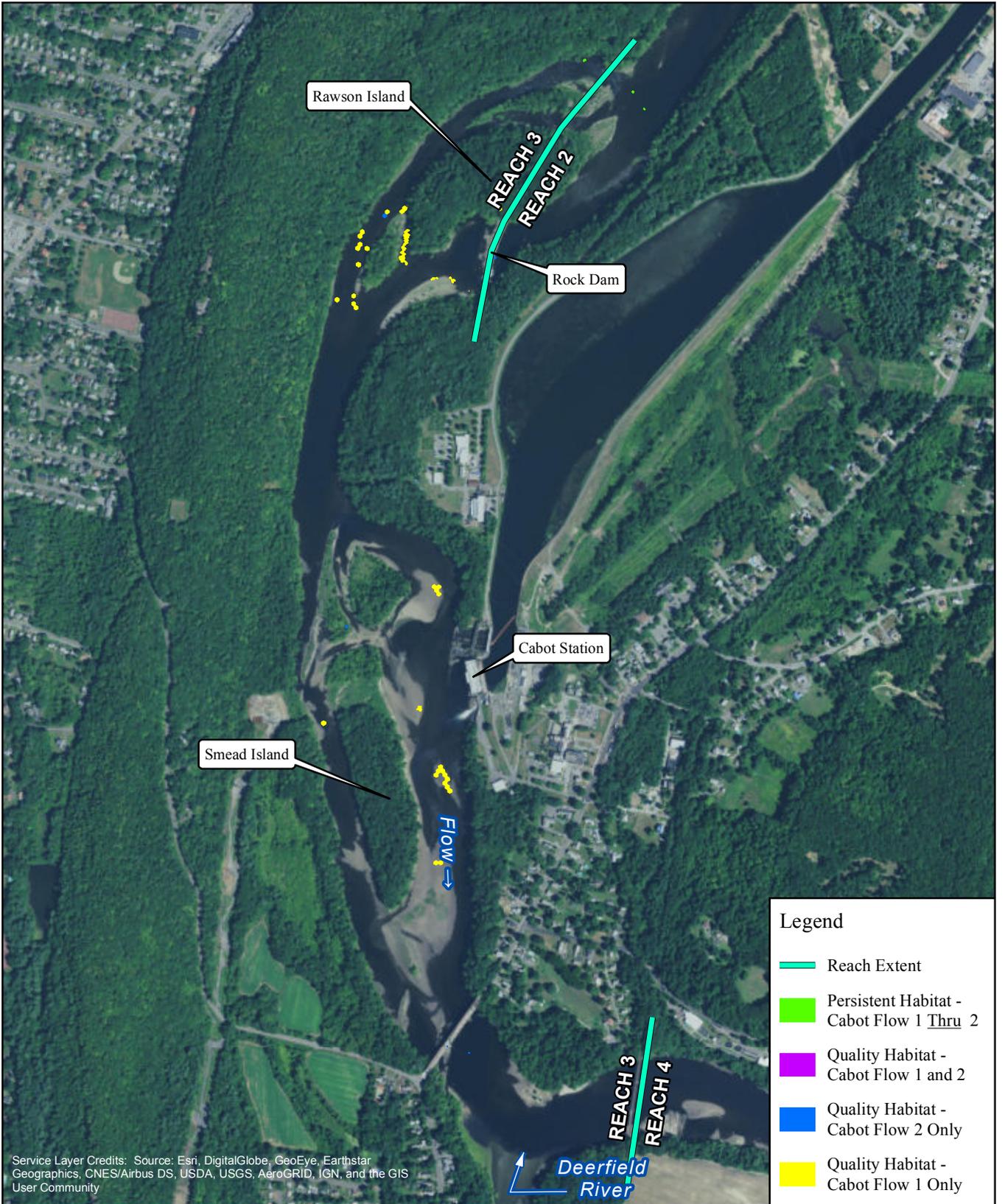


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- Quality Habitat - Cabot Flow 1 Only

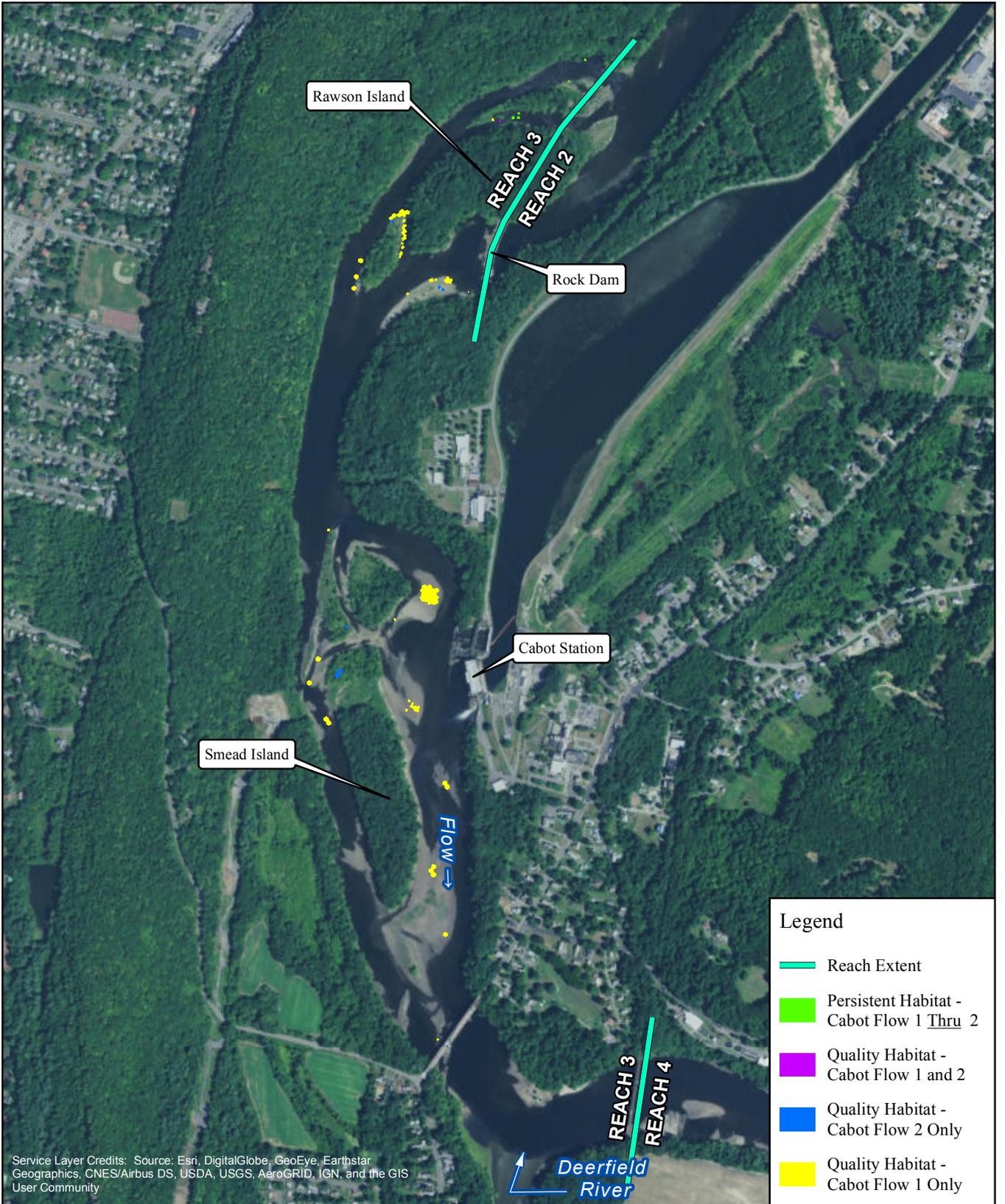
FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

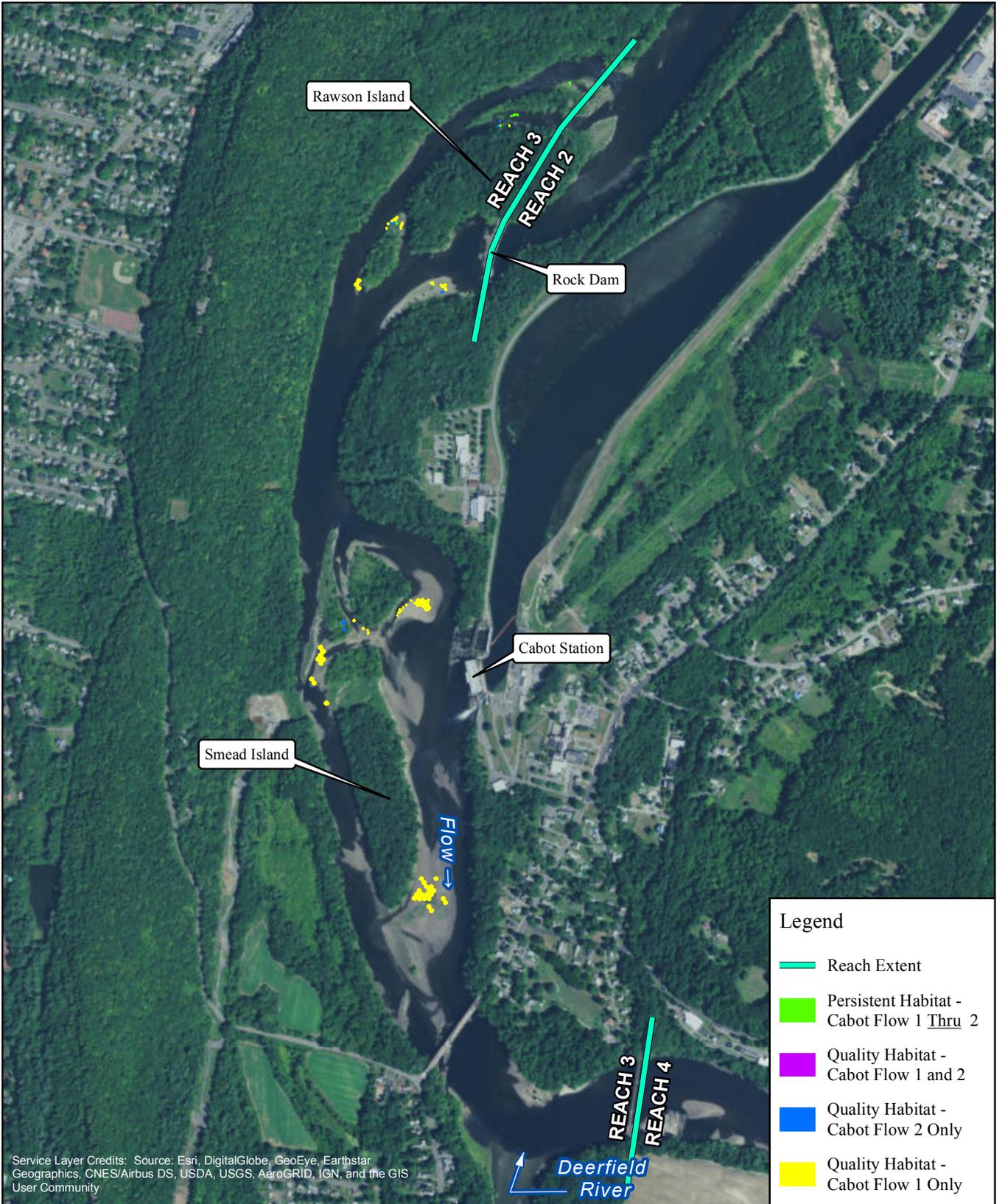
FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

N

0 500 1,000 2,000 Feet

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

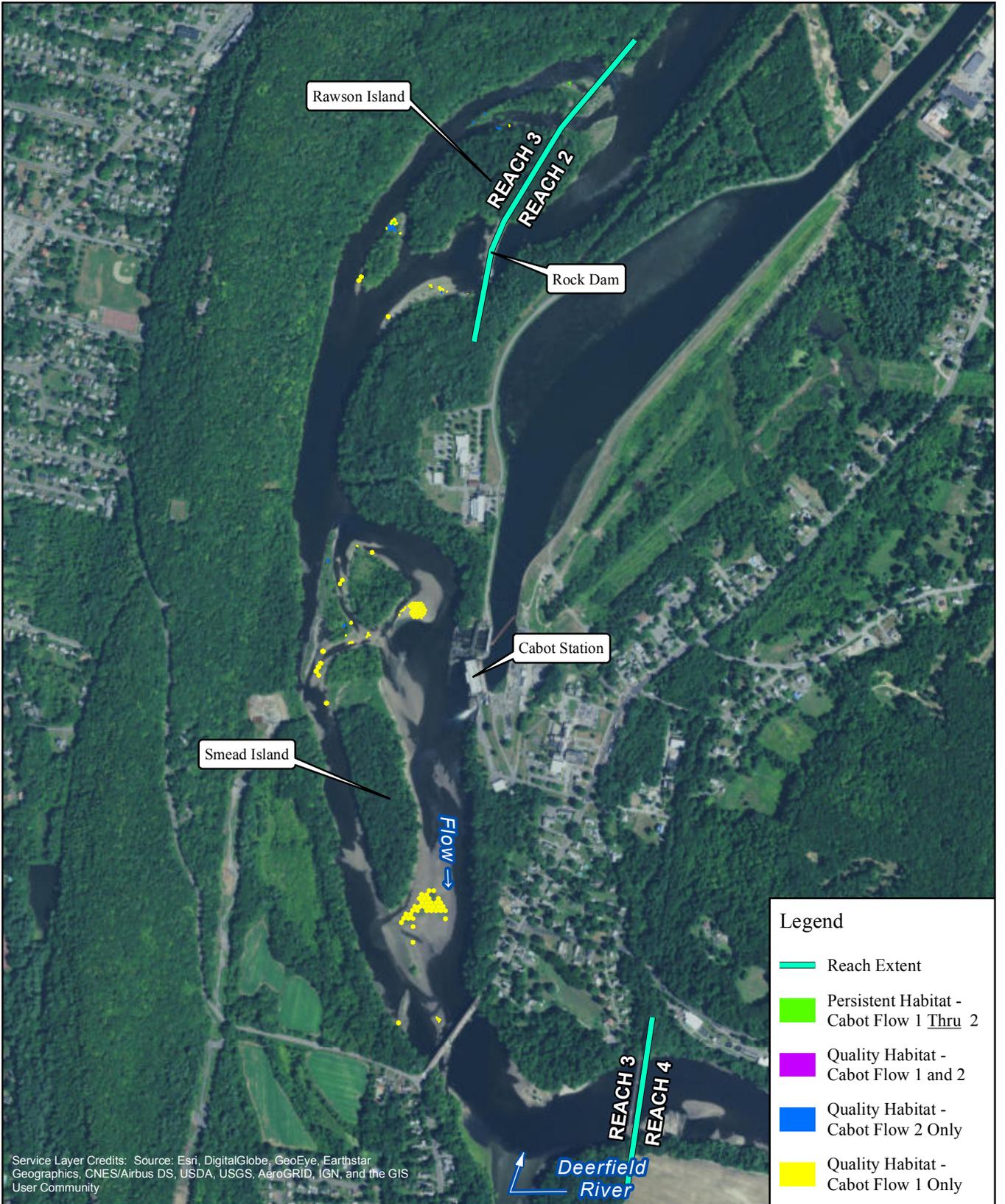


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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

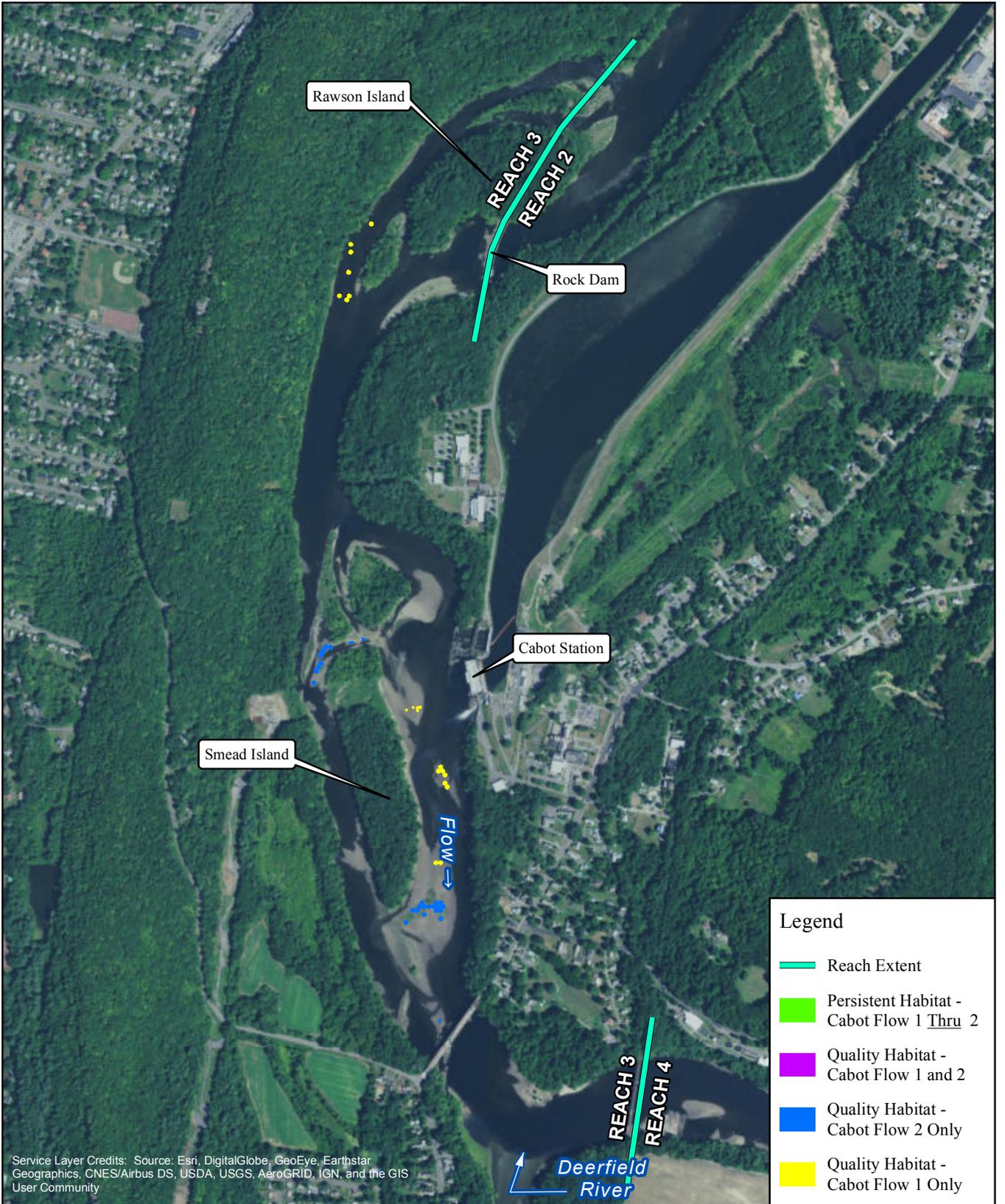


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RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

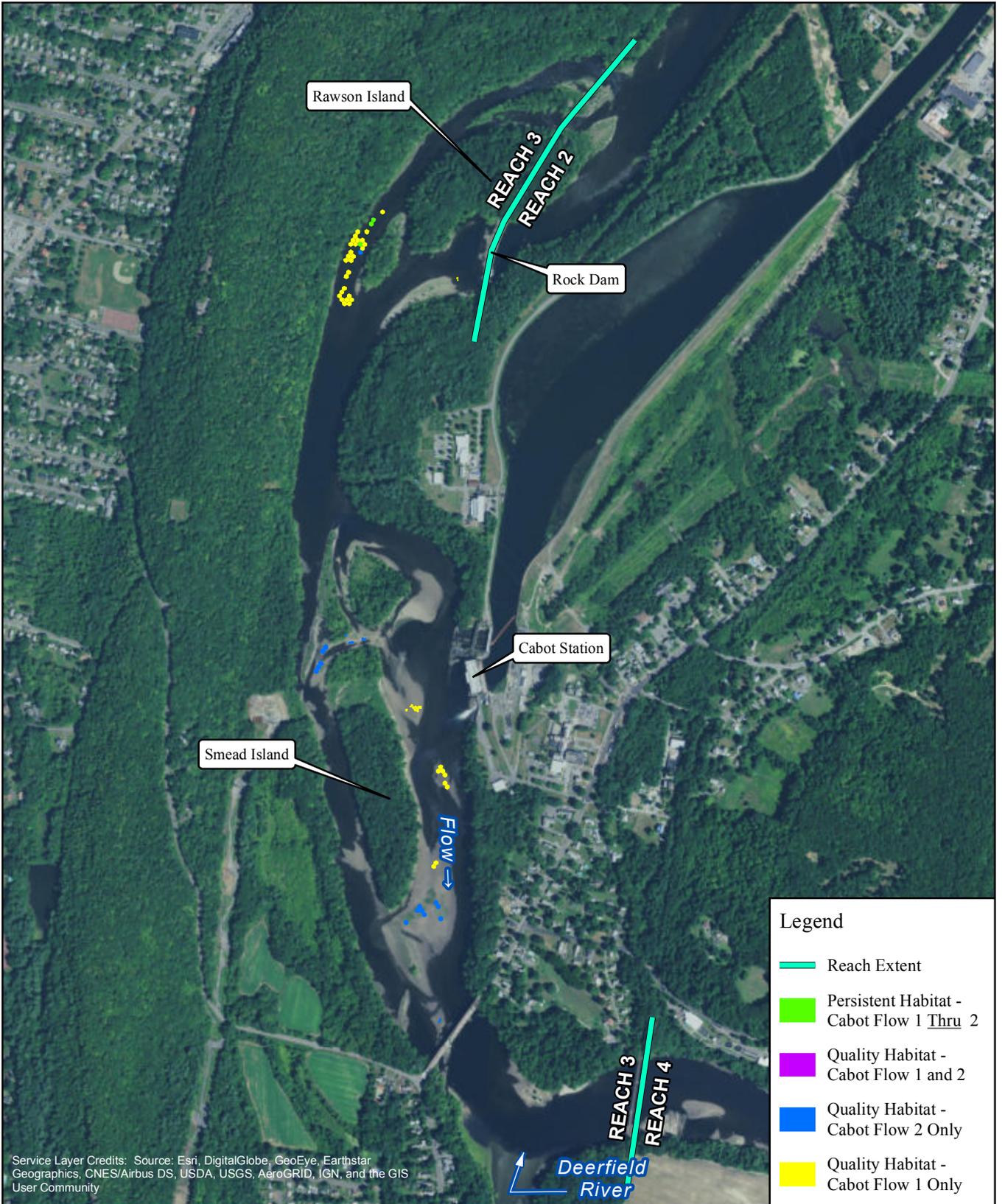


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RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

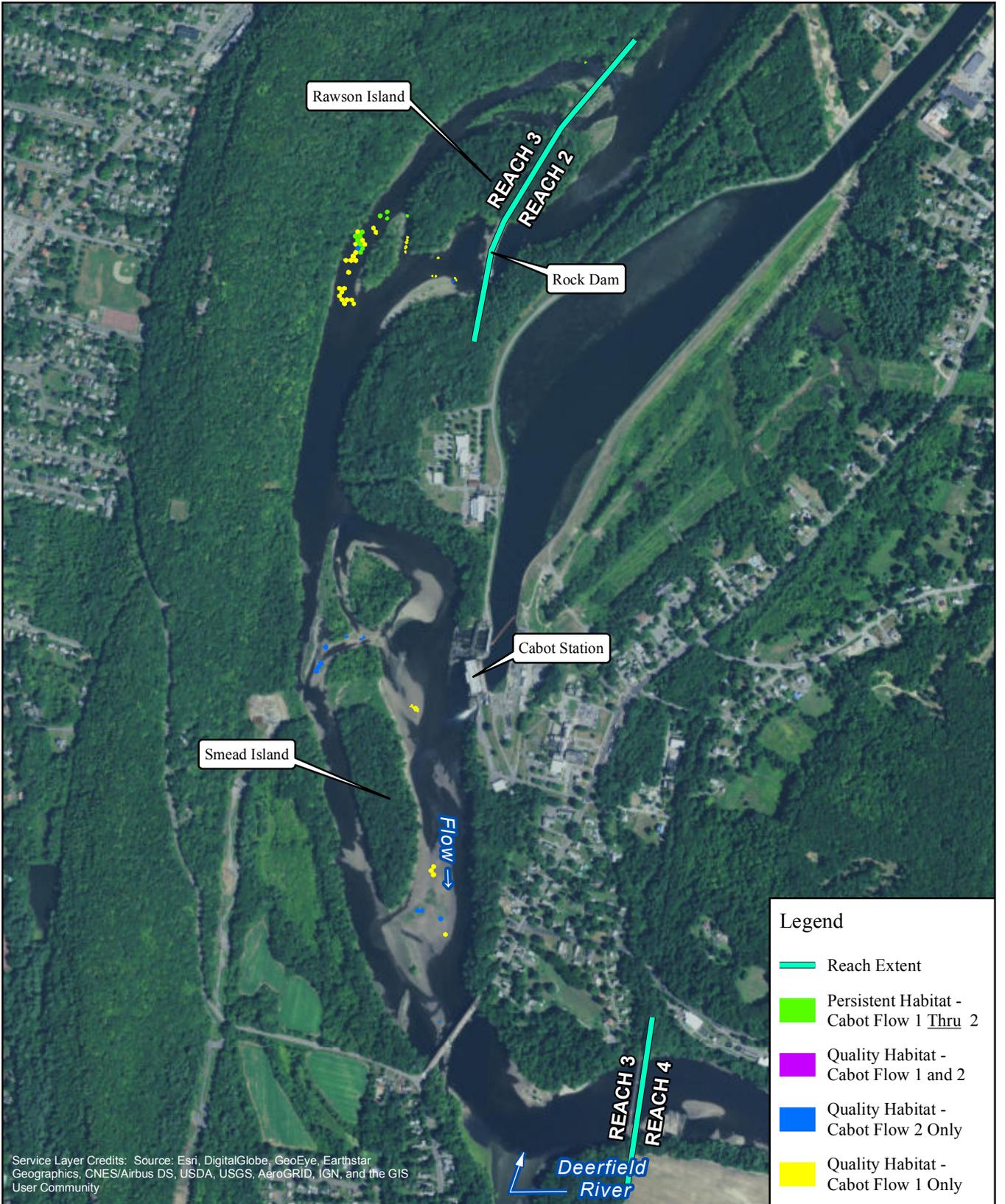


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

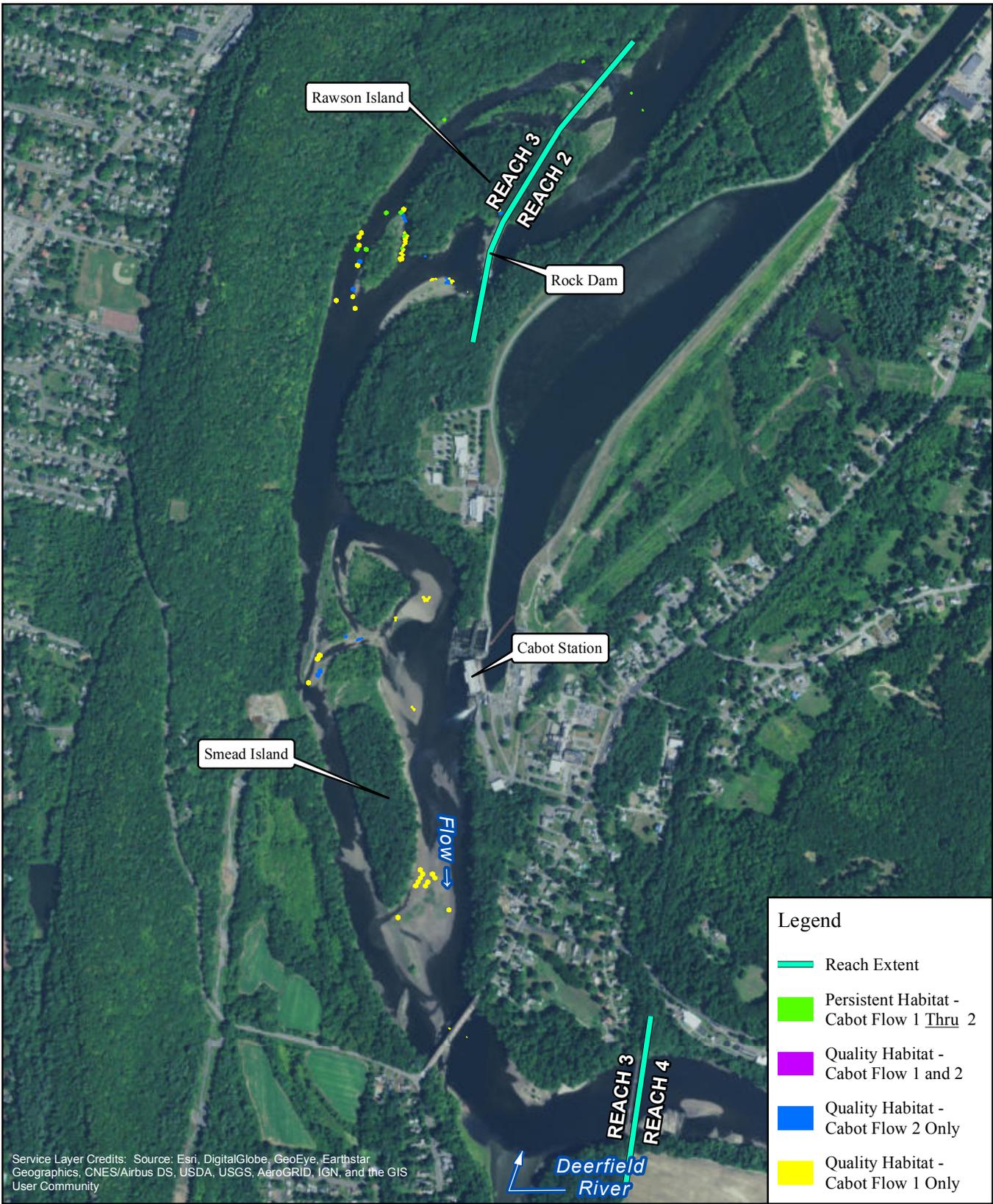


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



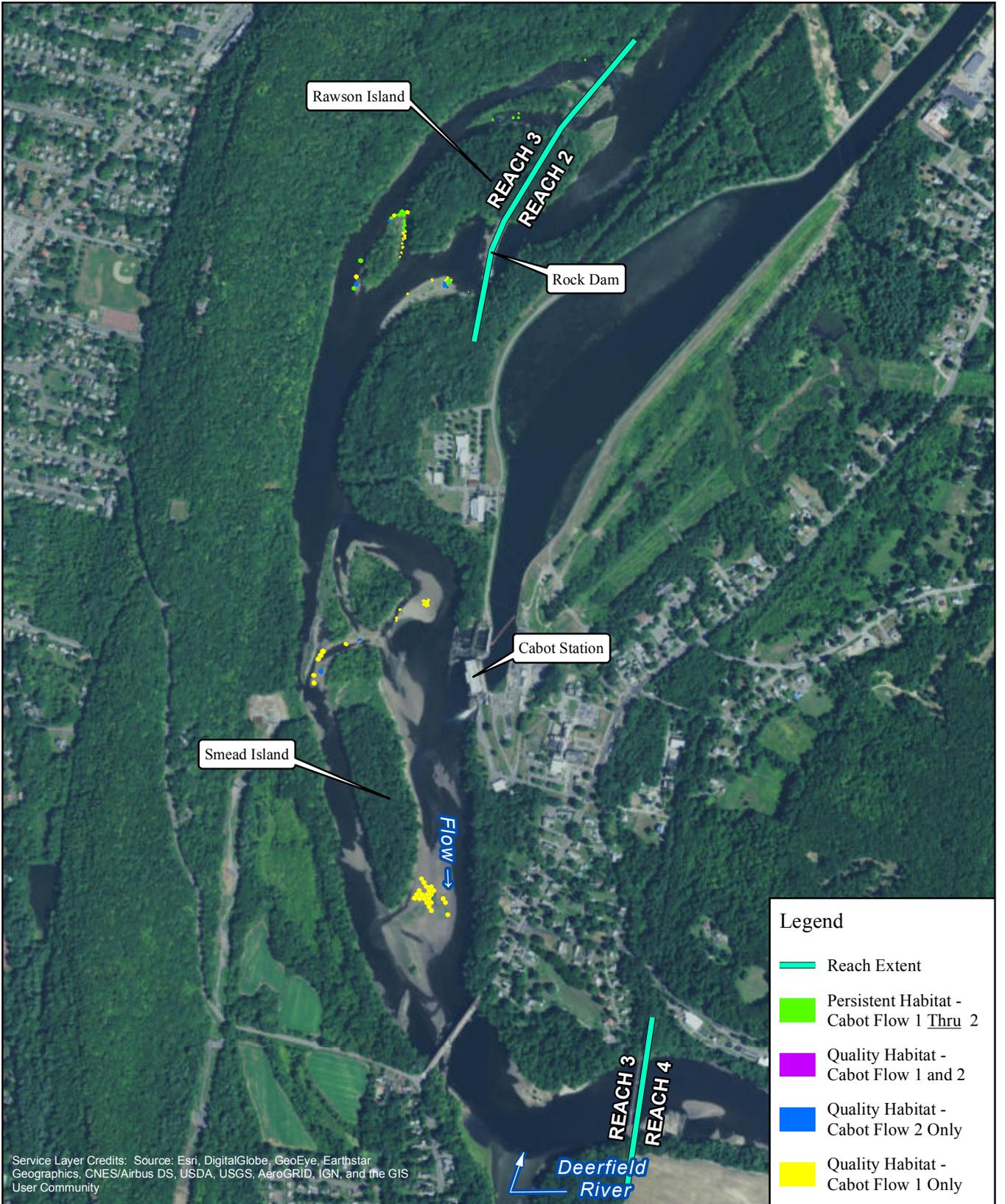
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

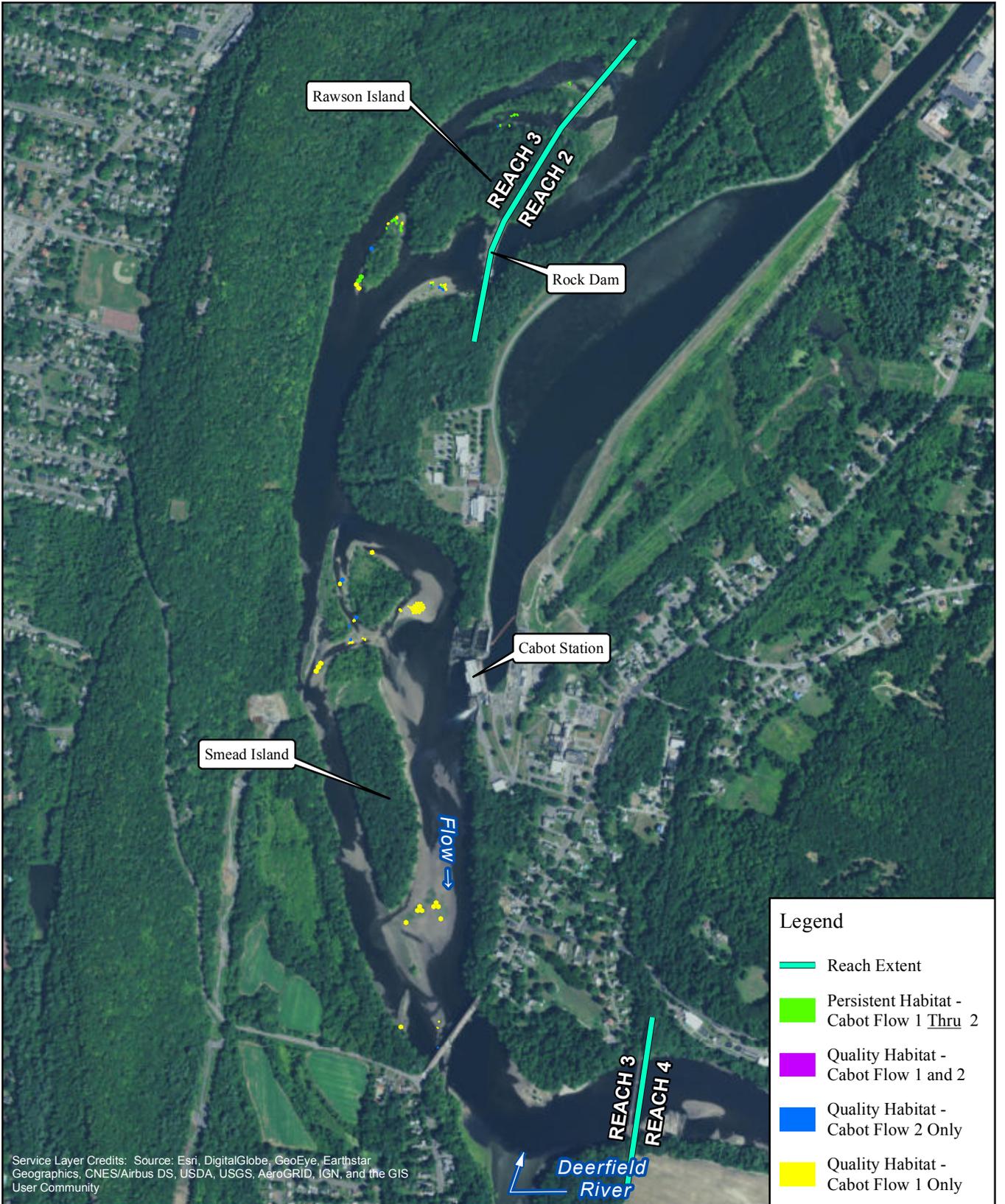
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

0 500 1,000 2,000 Feet

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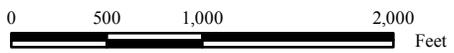


Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



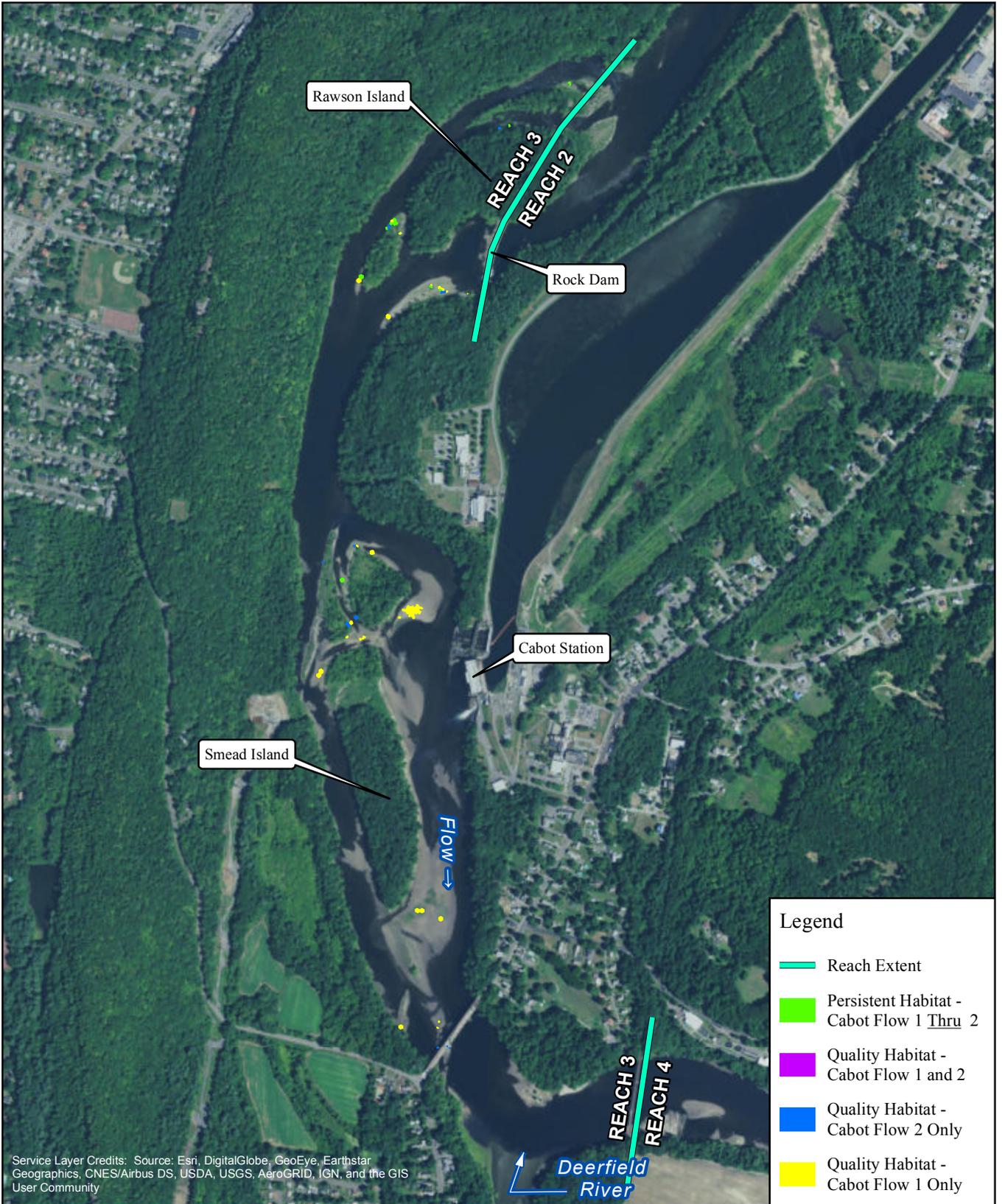
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning

Bypass Flow:	5000 cfs
Cabot Flow 1:	4500 cfs
Cabot Flow 2:	9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

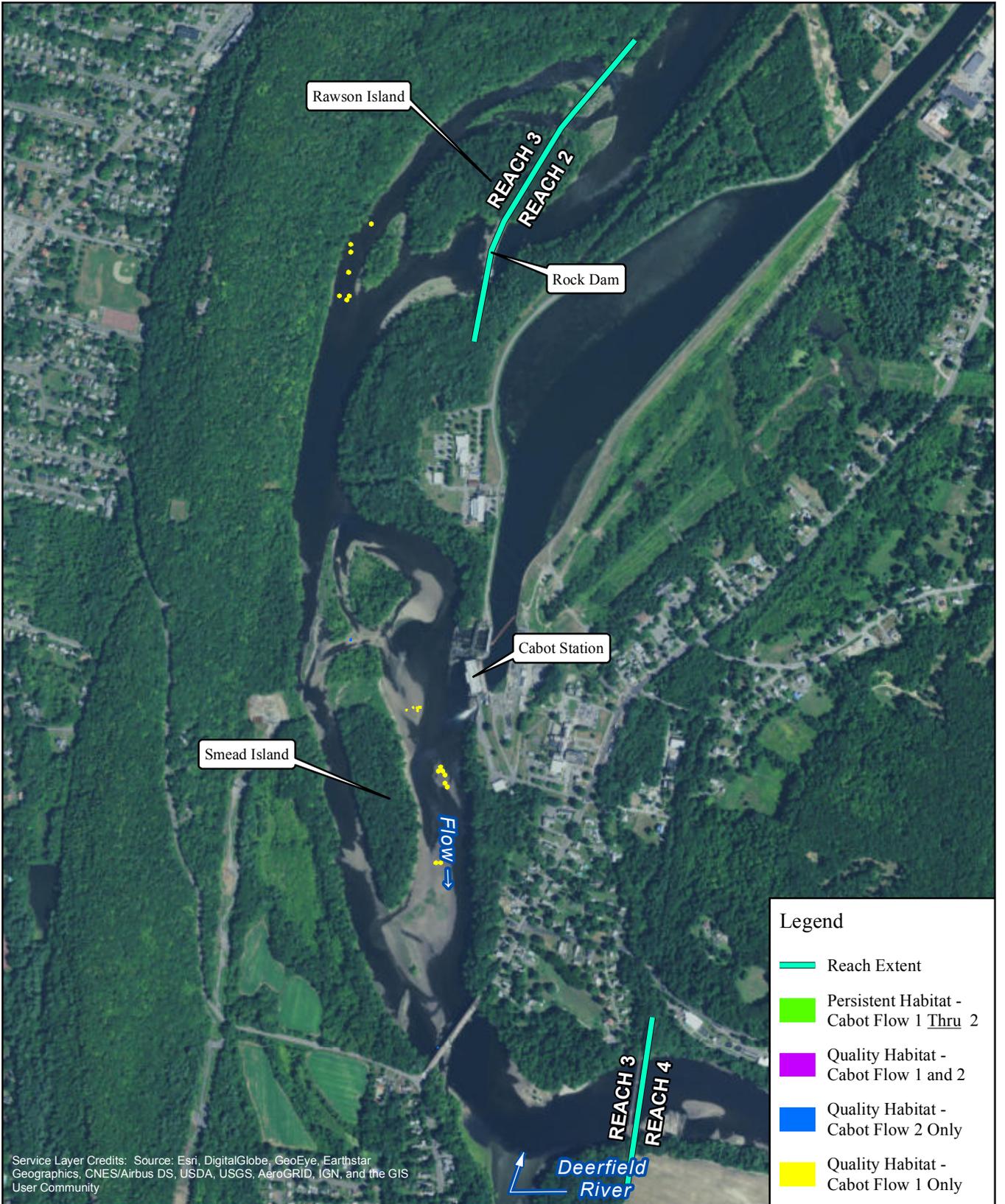


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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

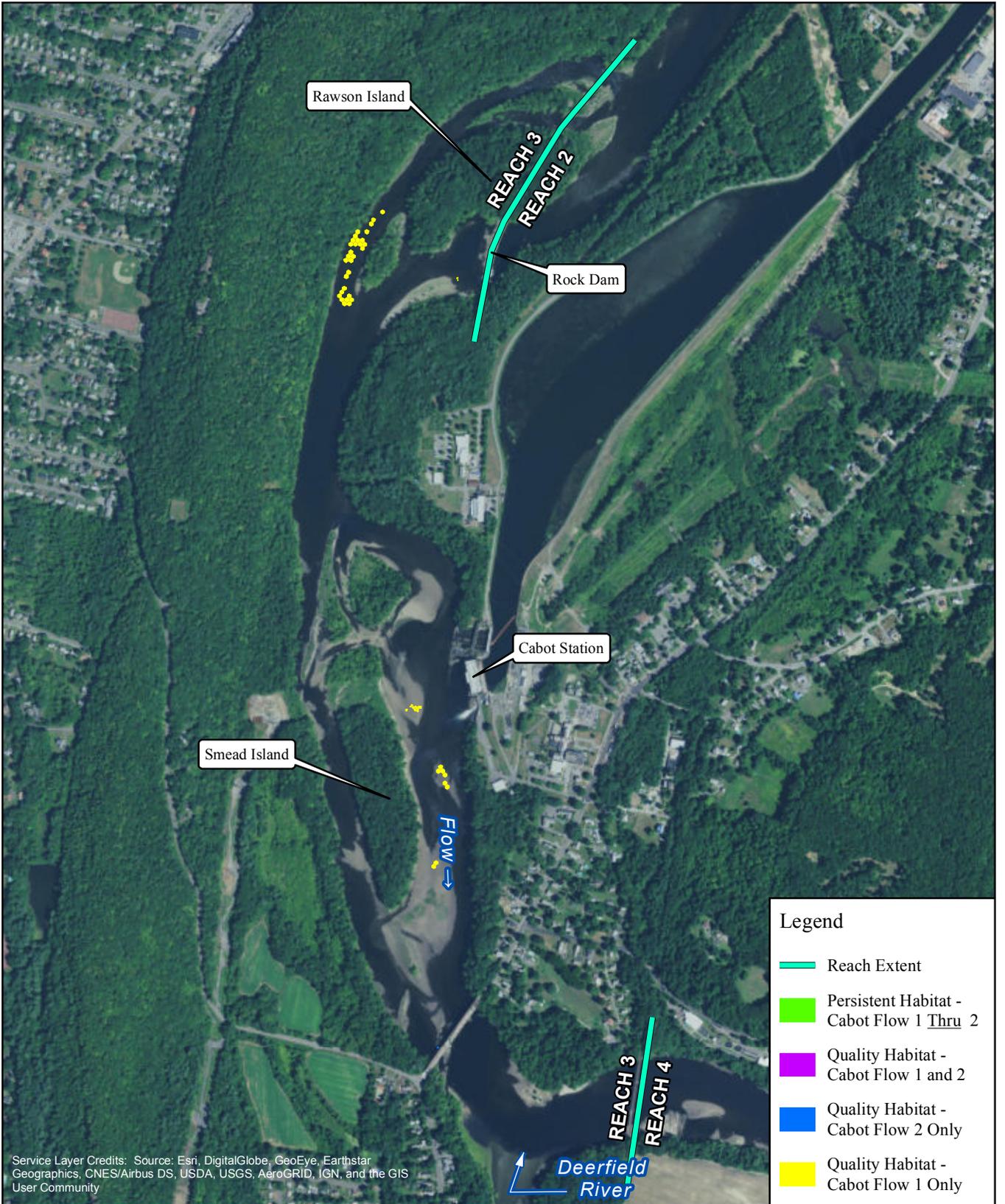


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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

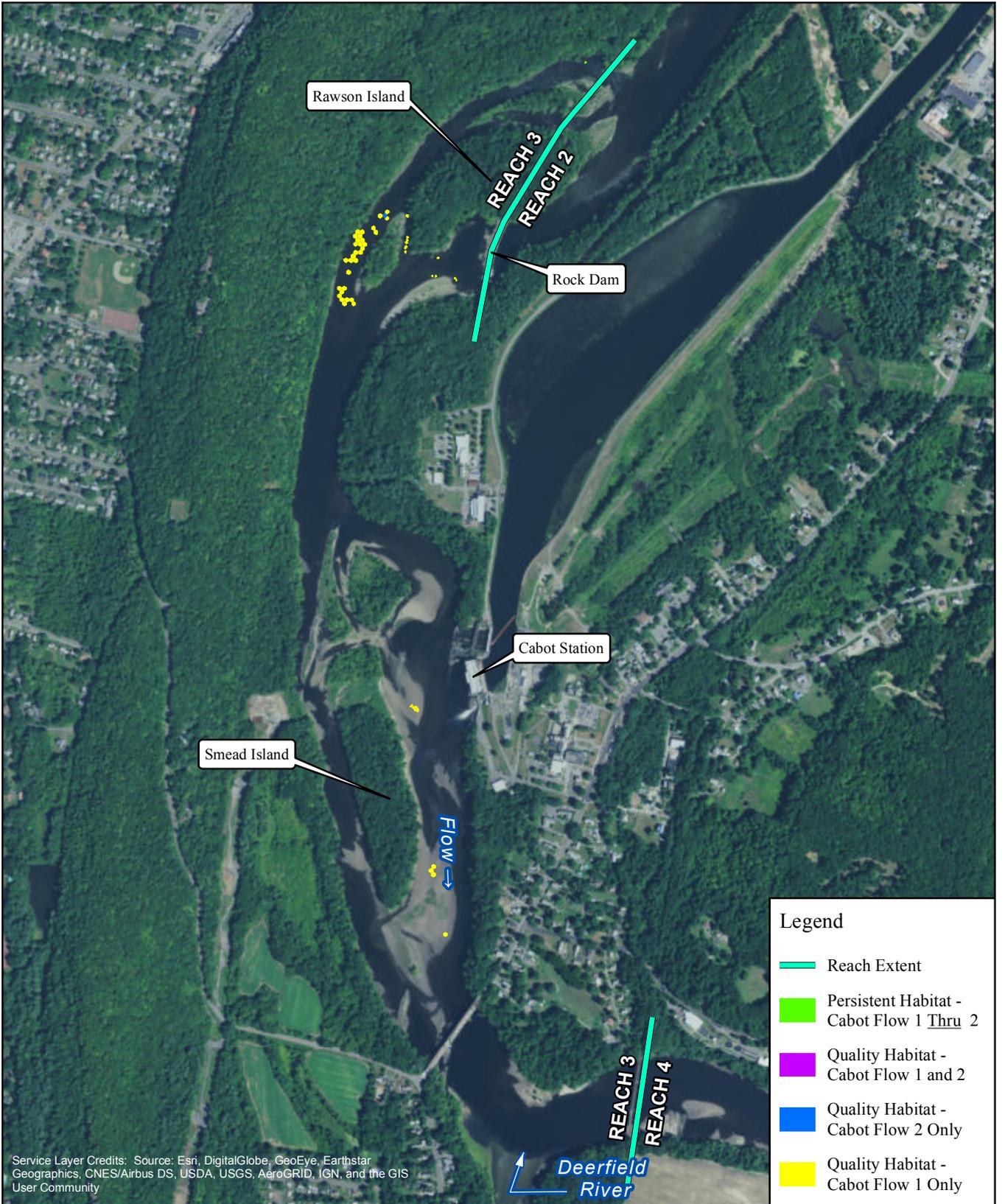
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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

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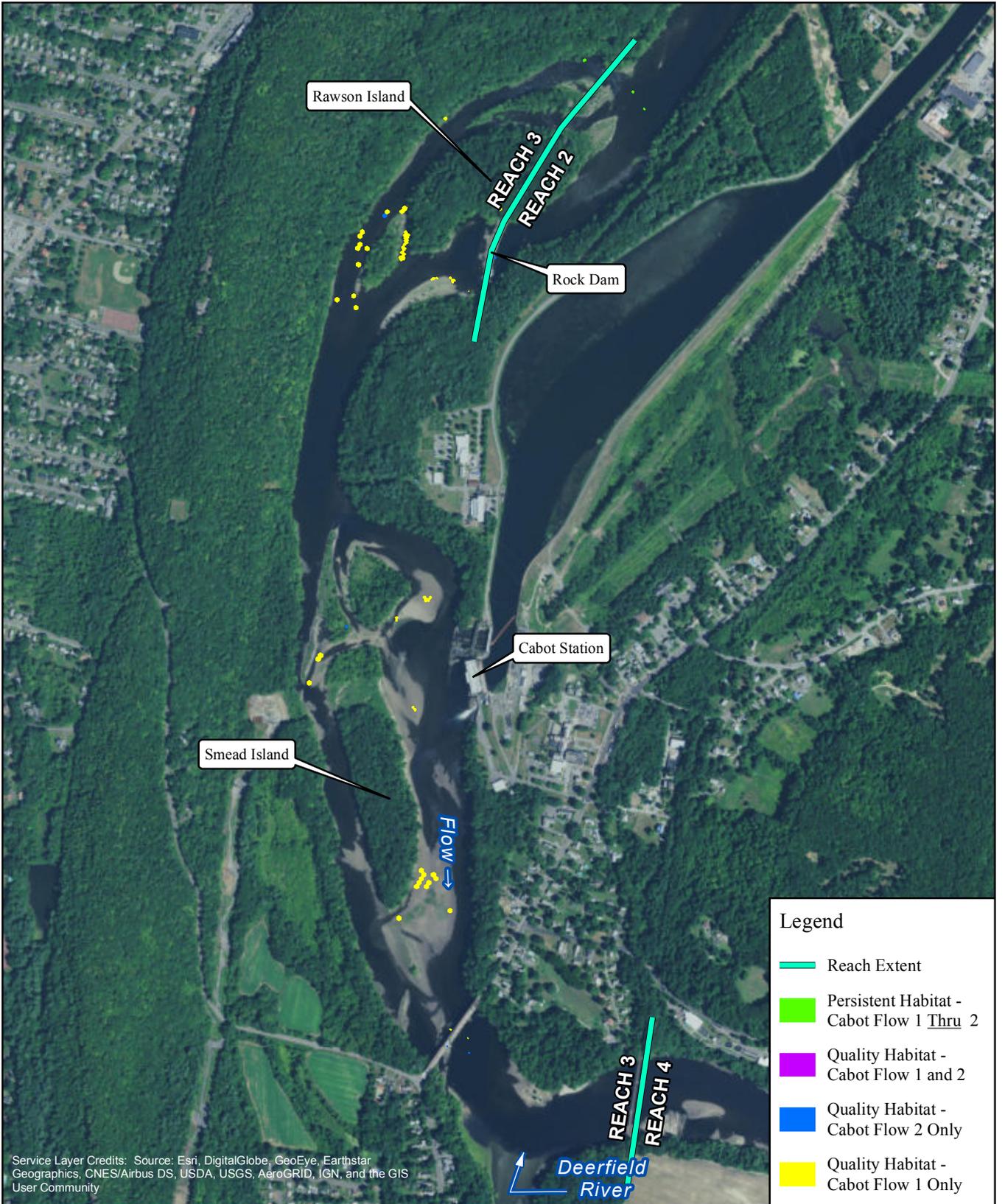
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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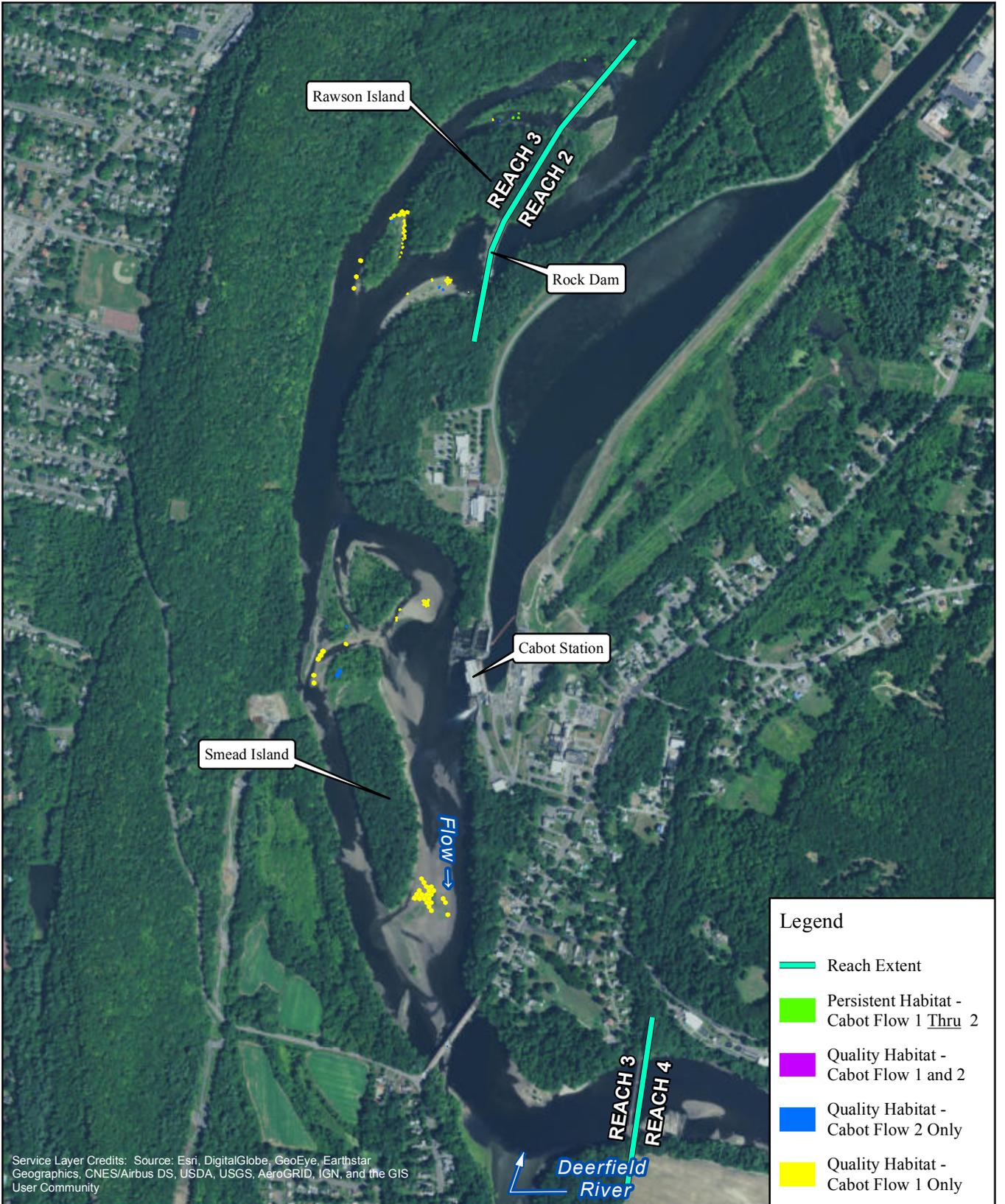


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

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- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

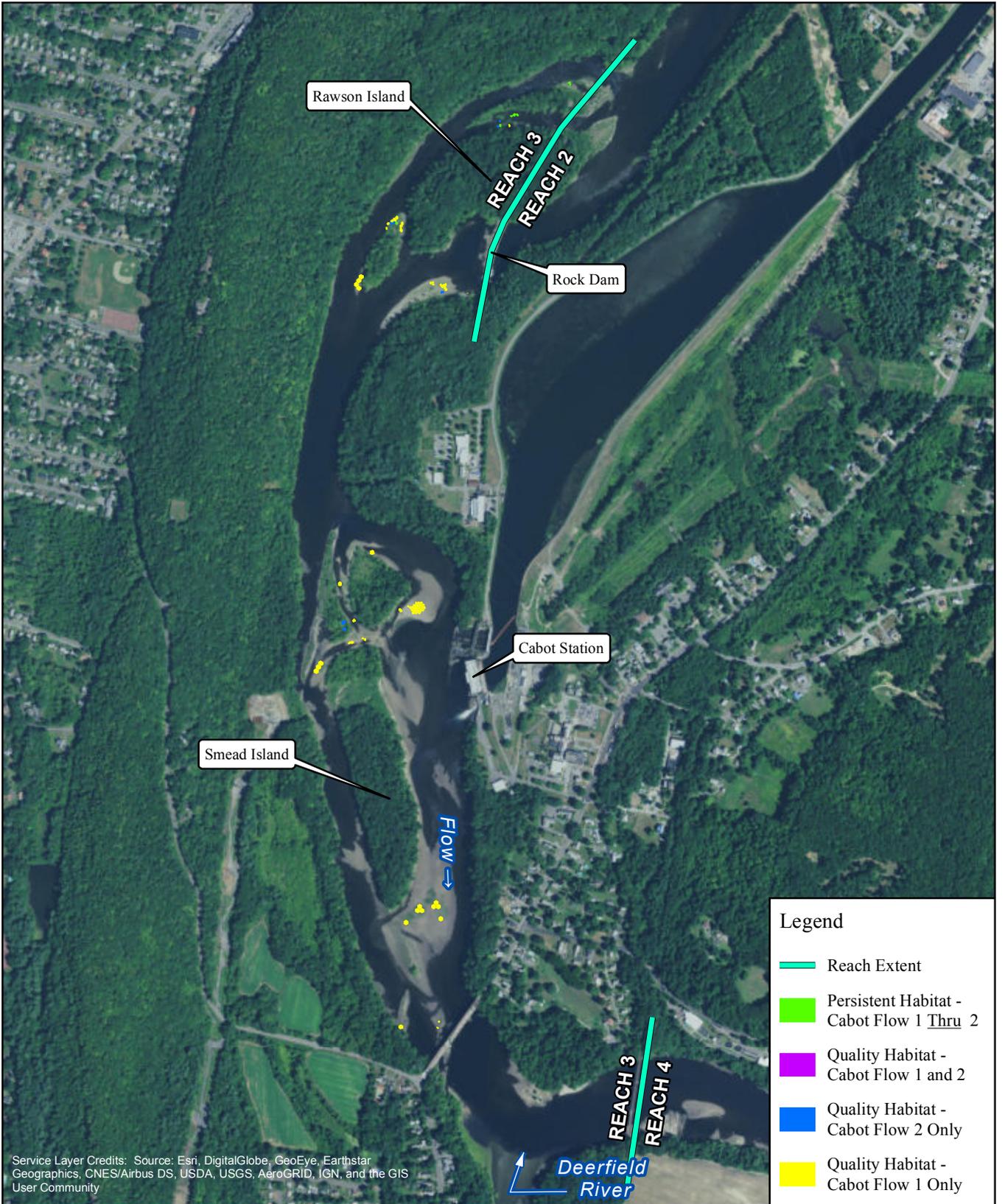
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

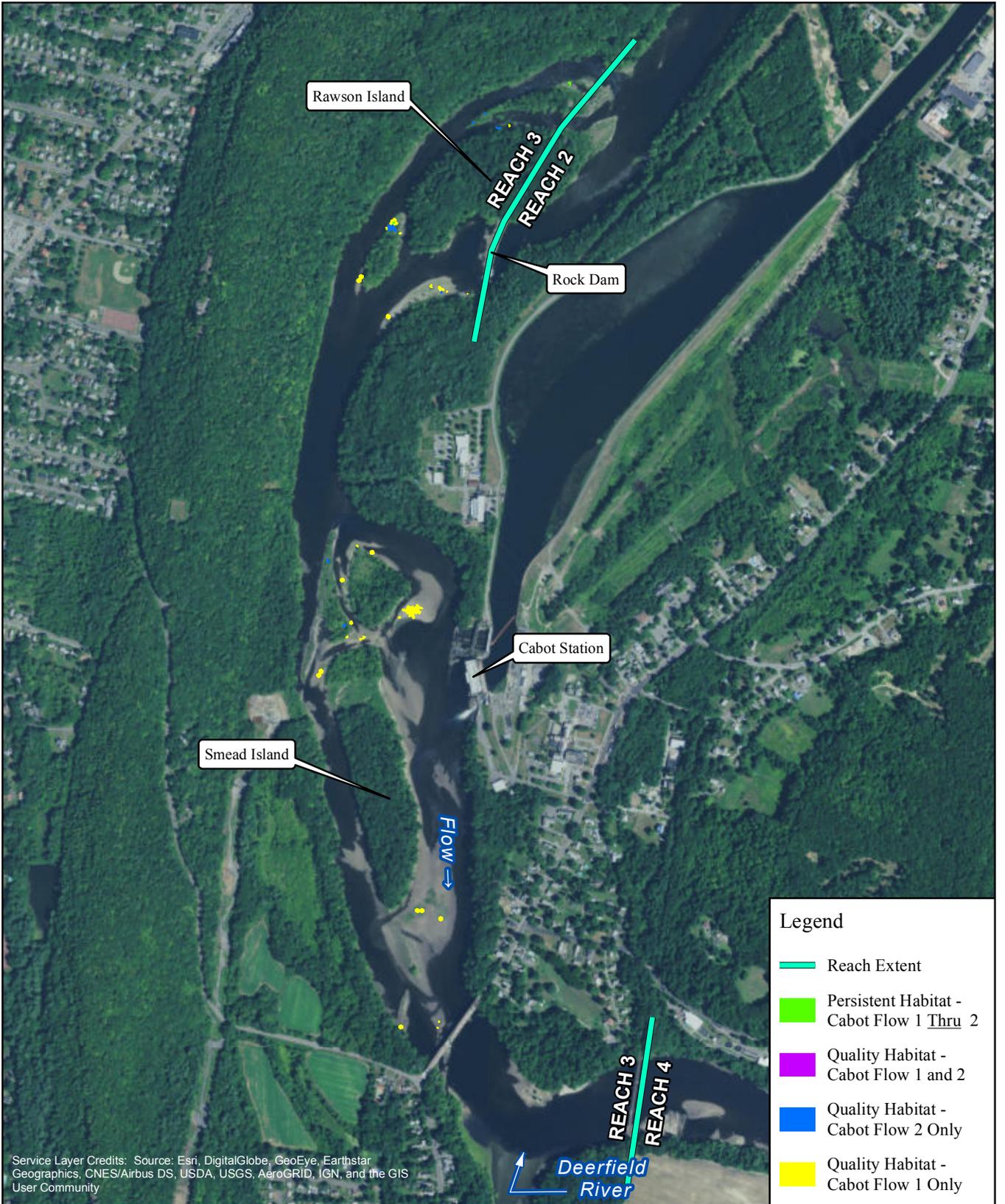


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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

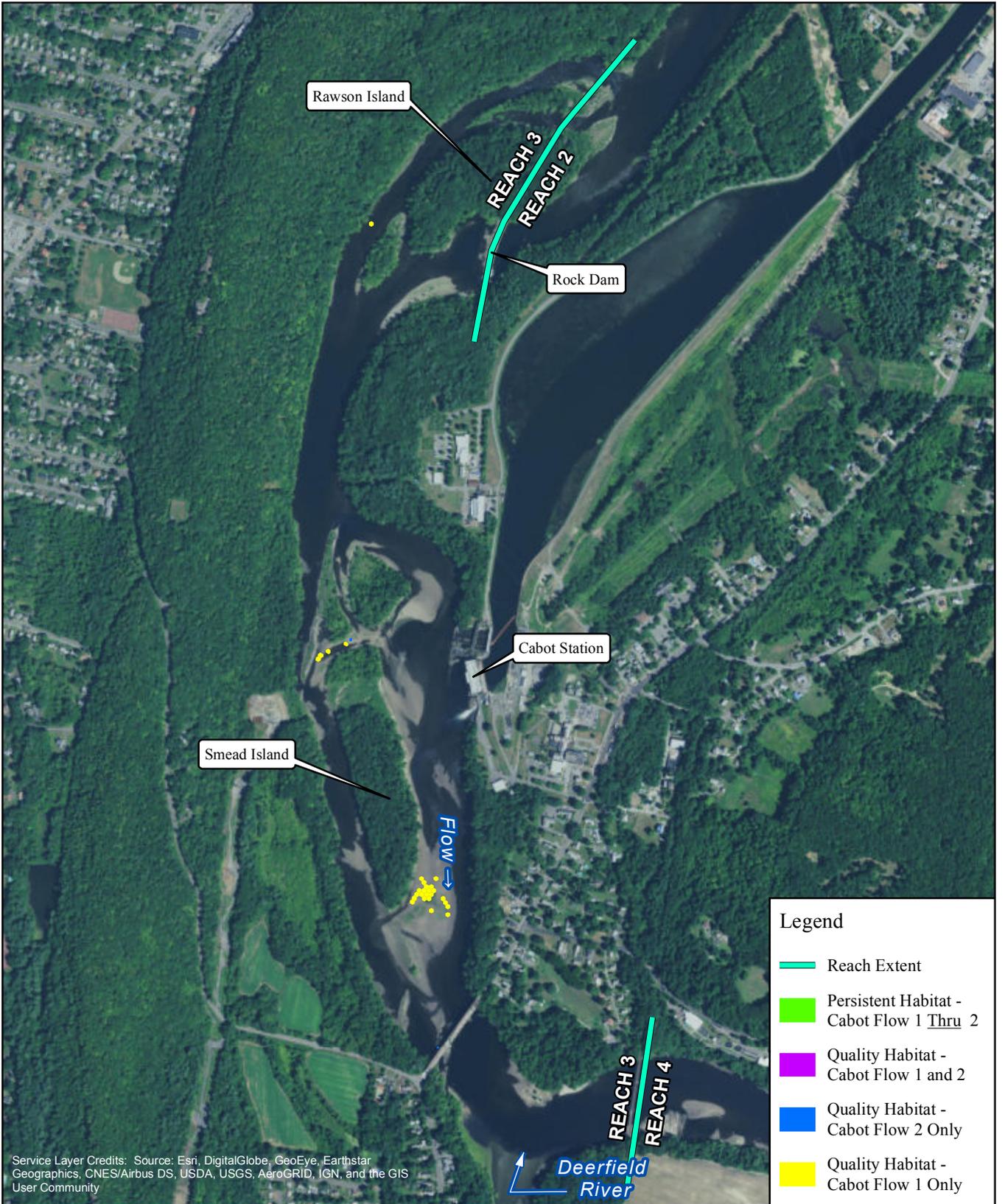


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RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 6500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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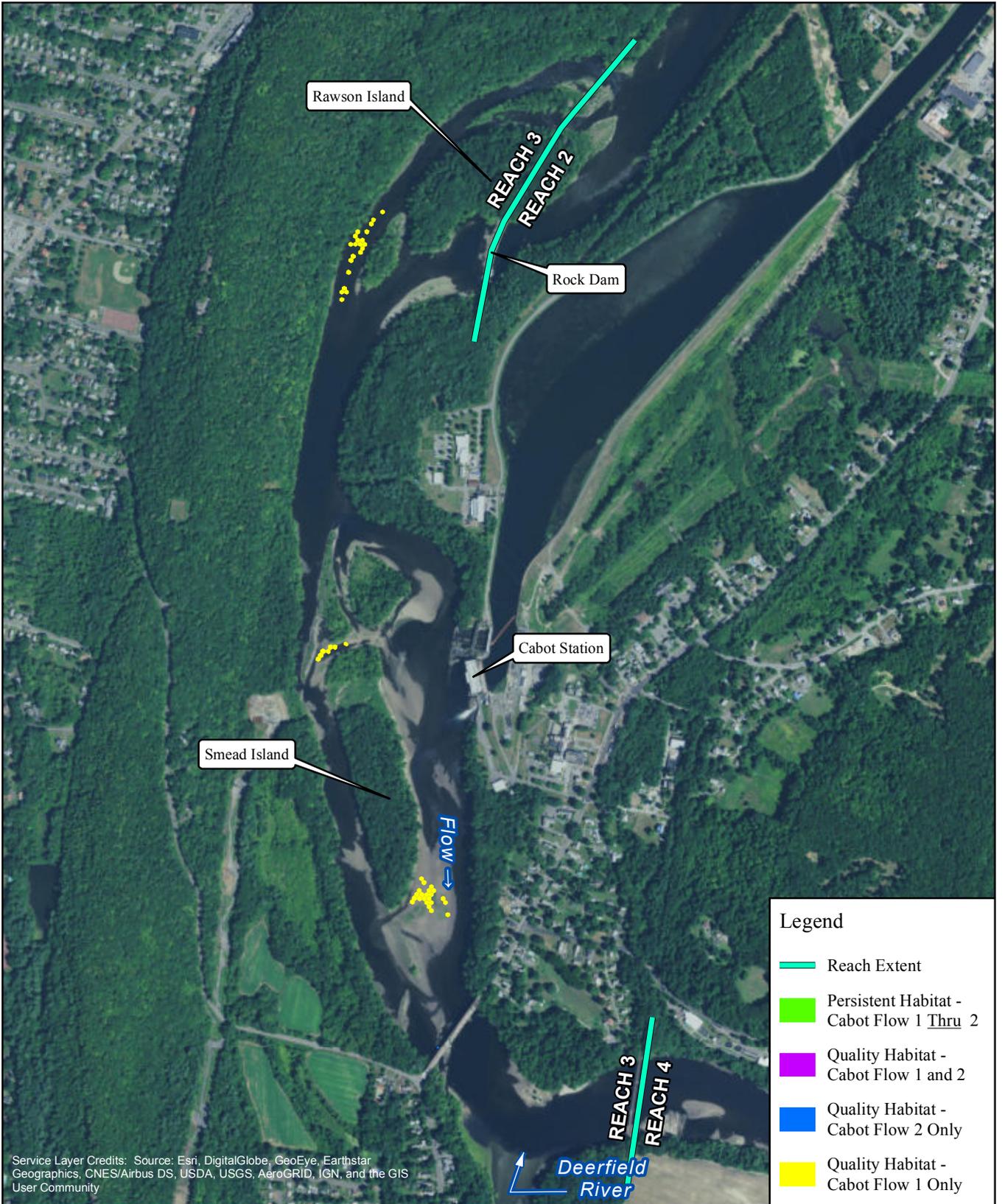


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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 200 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

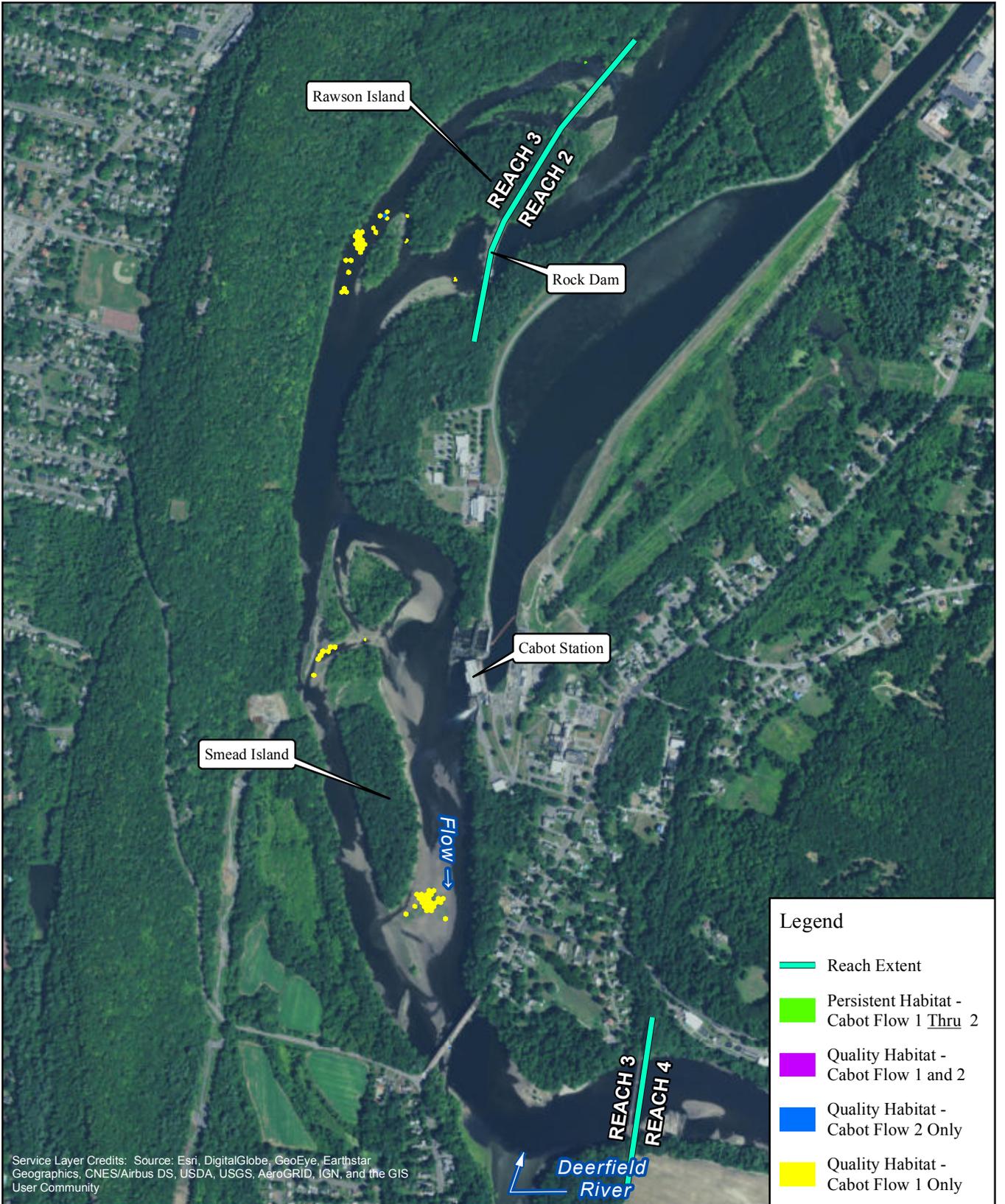
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 500 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

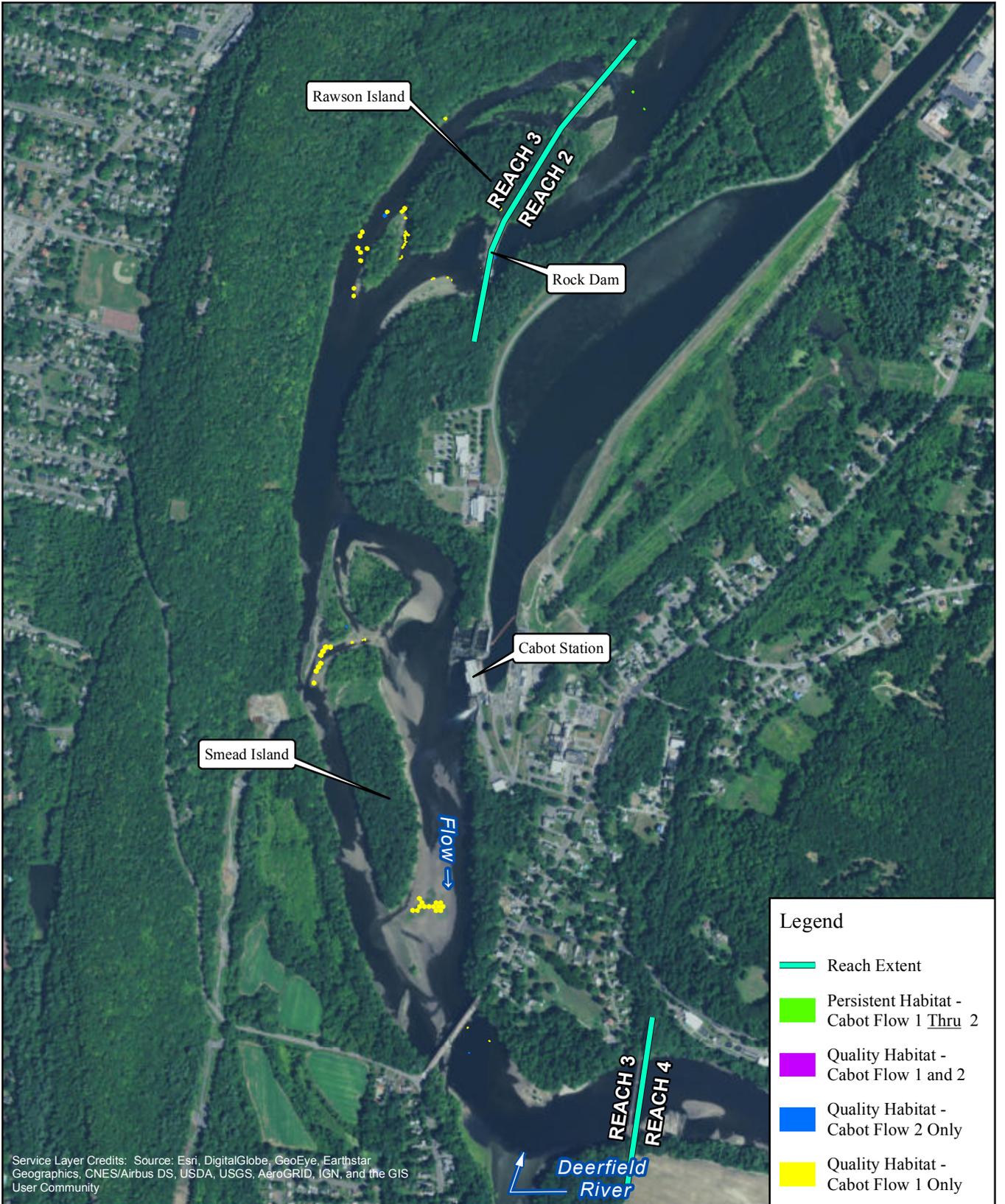
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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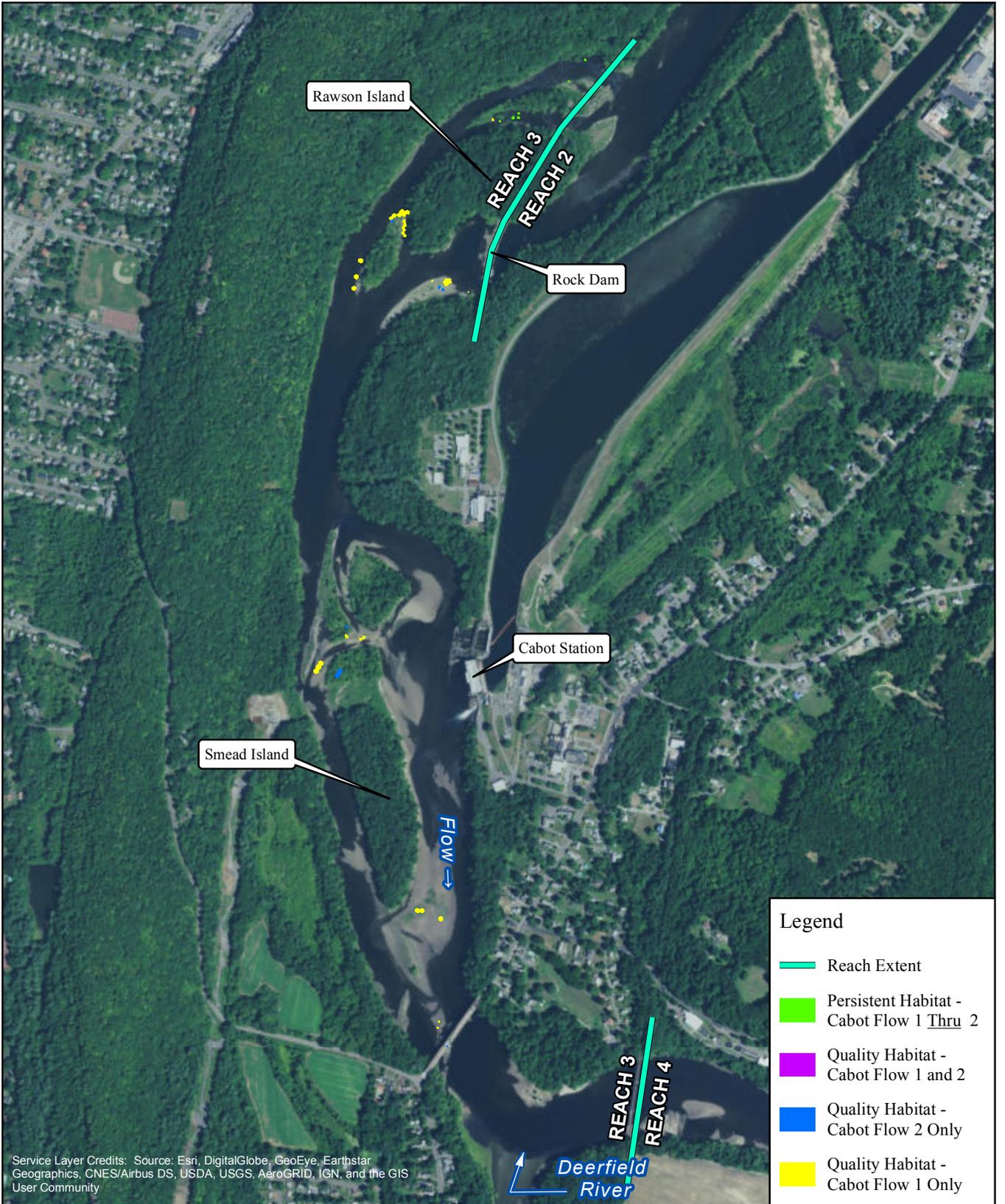


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 Turners Falls Hydroelectric Project No. 1889
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Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

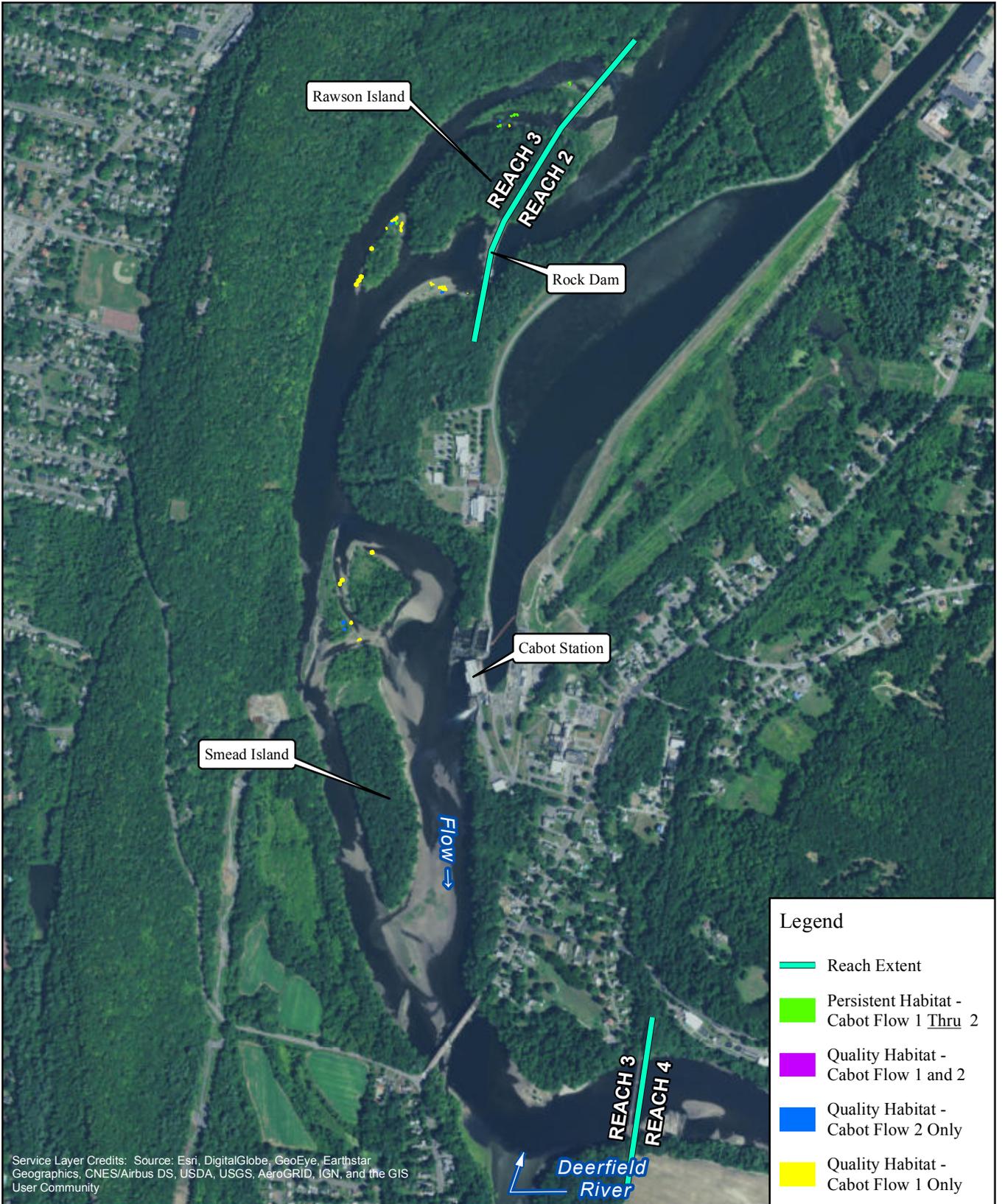


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 3000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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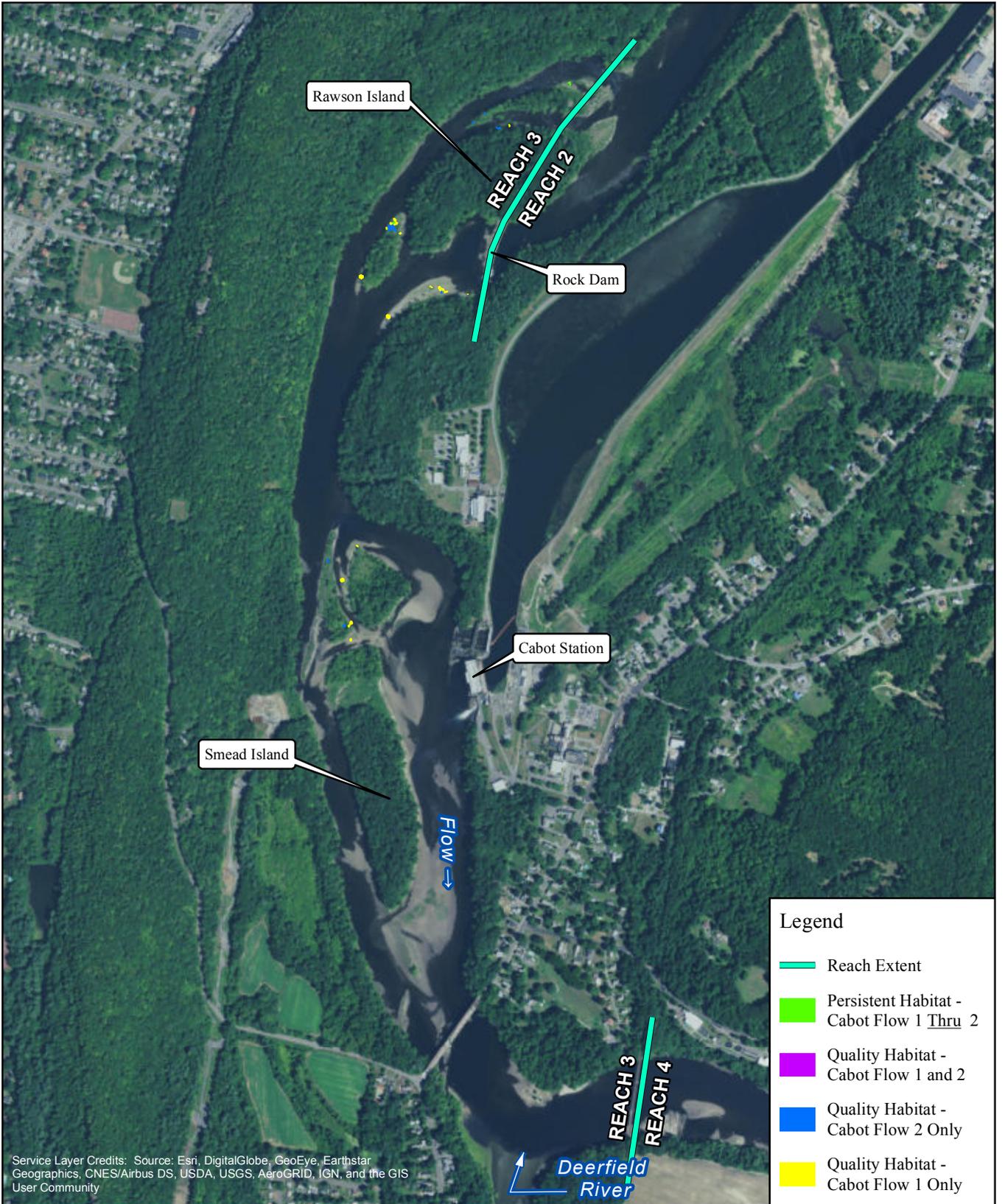
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Sea Lamprey-Spawning
 Bypass Flow: 5000 cfs
 Cabot Flow 1: 7000 cfs
 Cabot Flow 2: 14000 cfs

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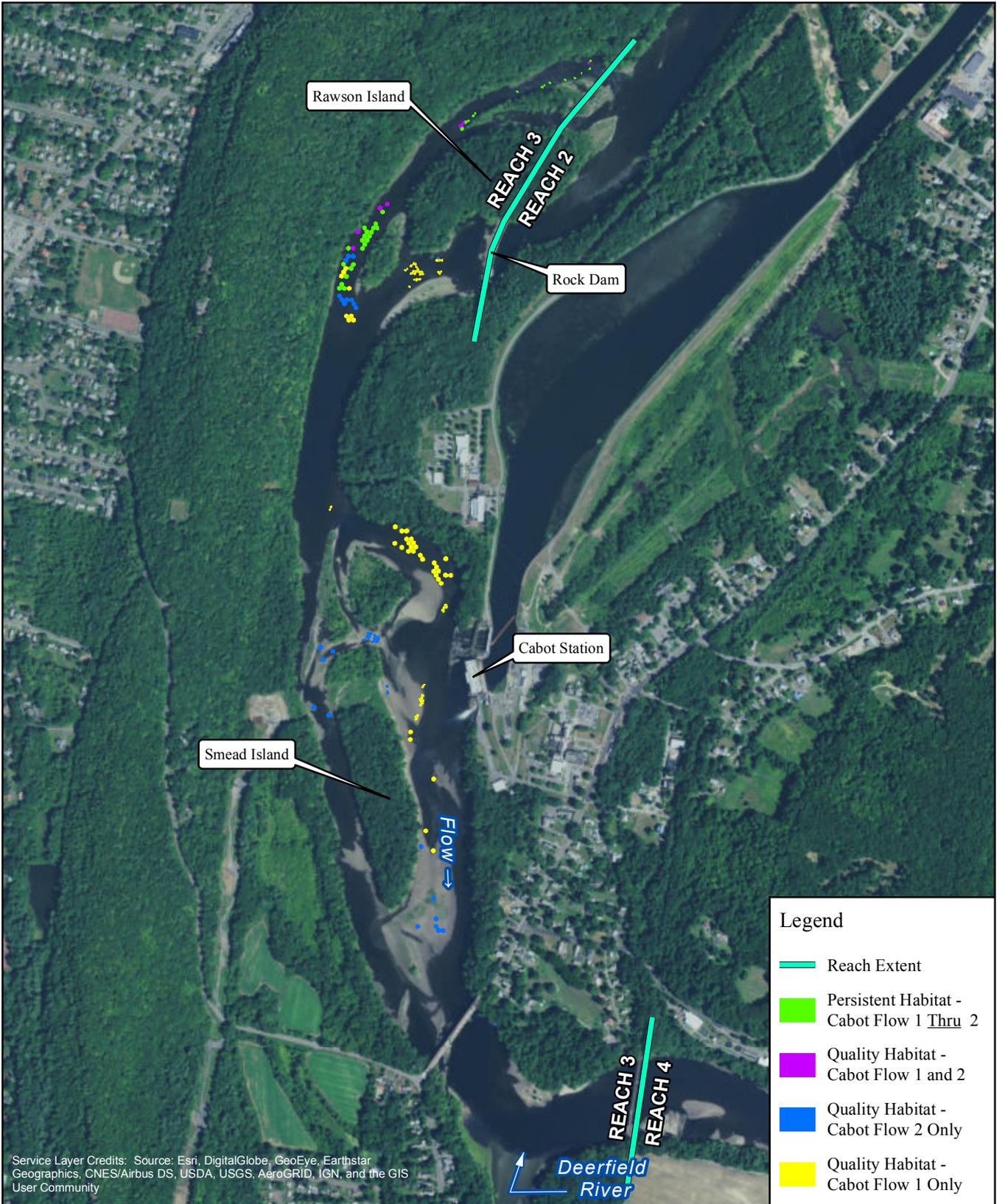
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat	
Sea Lamprey-Spawning	
Bypass Flow:	6500 cfs
Cabot Flow 1:	7000 cfs
Cabot Flow 2:	14000 cfs

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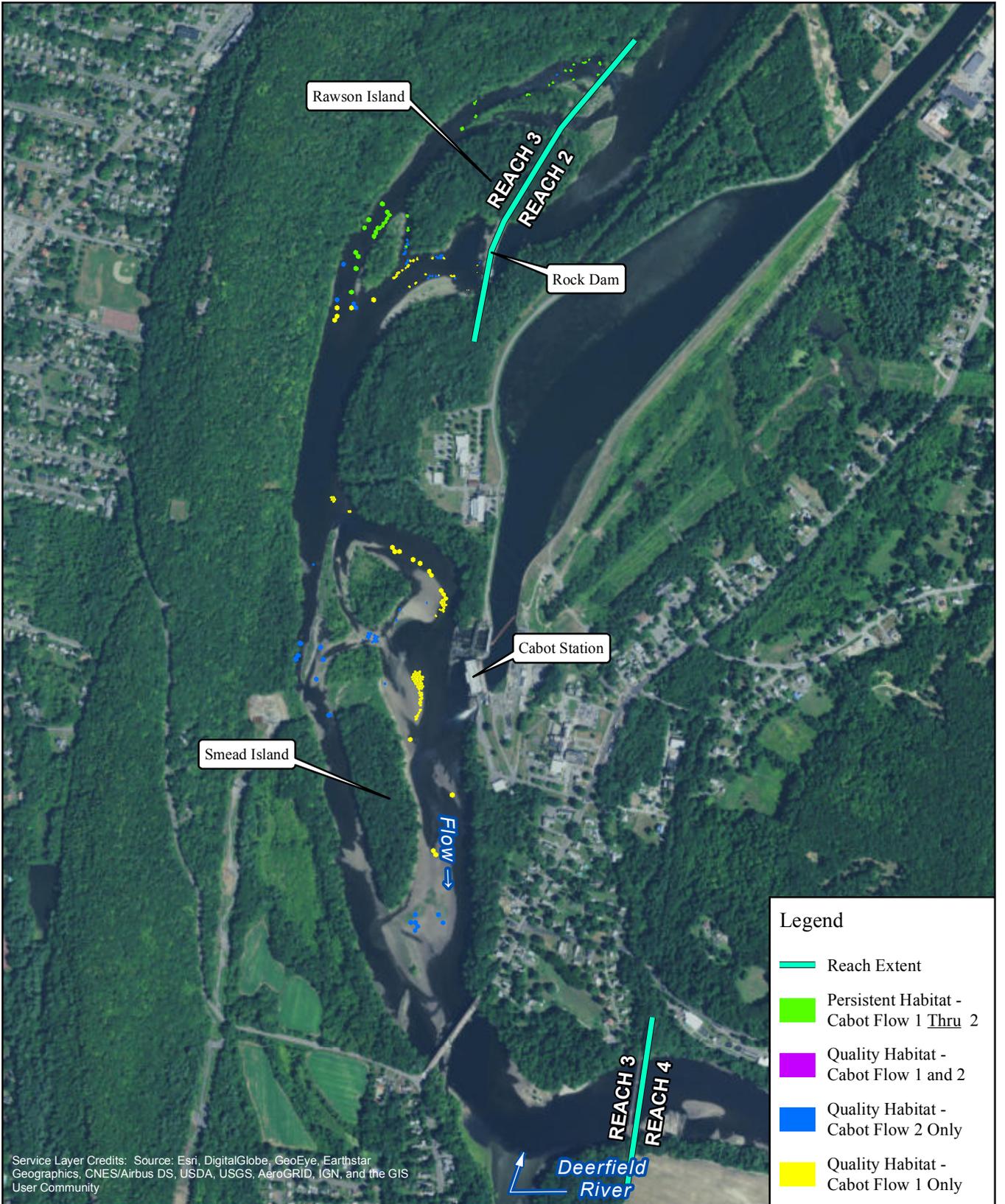
Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

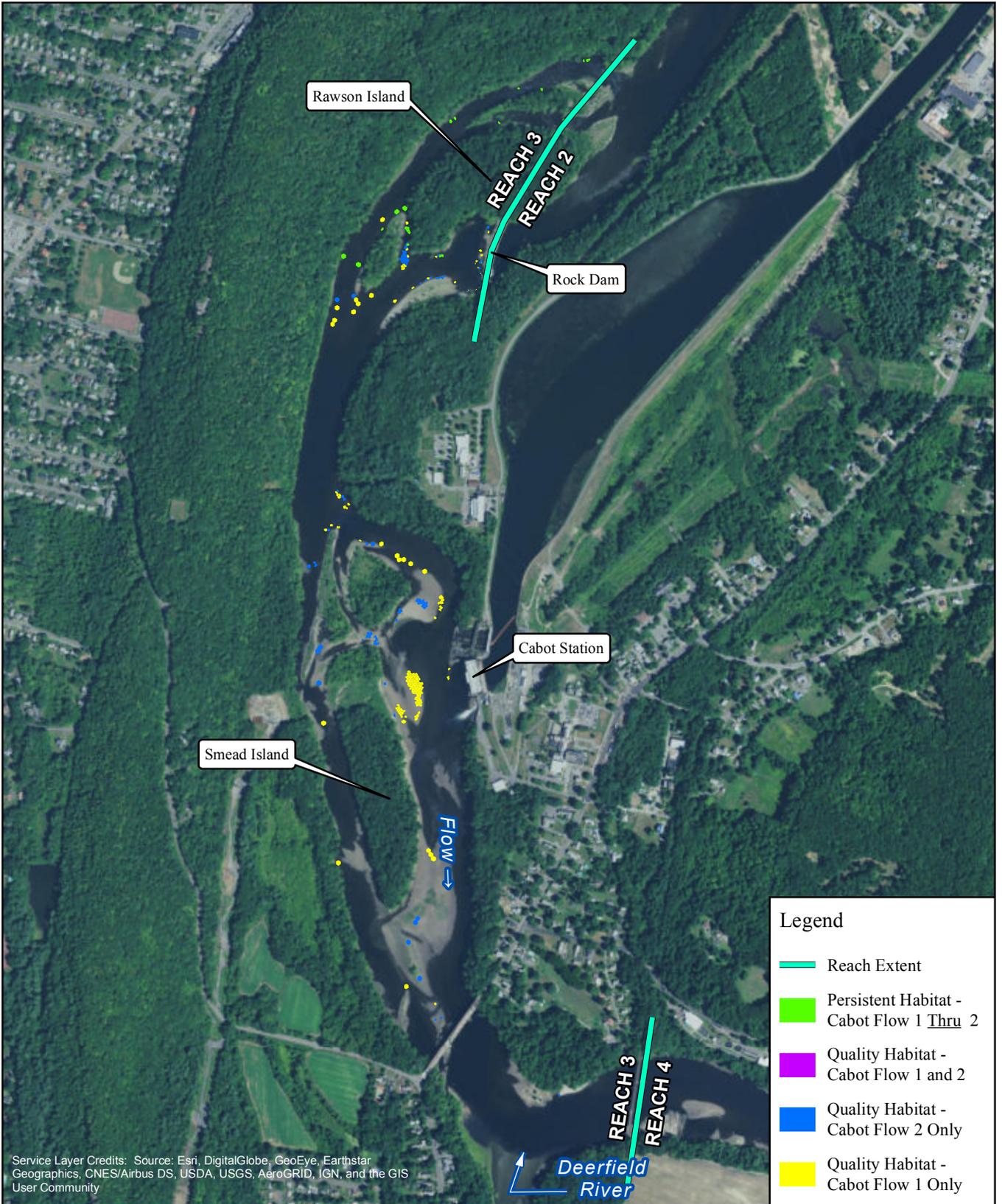
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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Legend

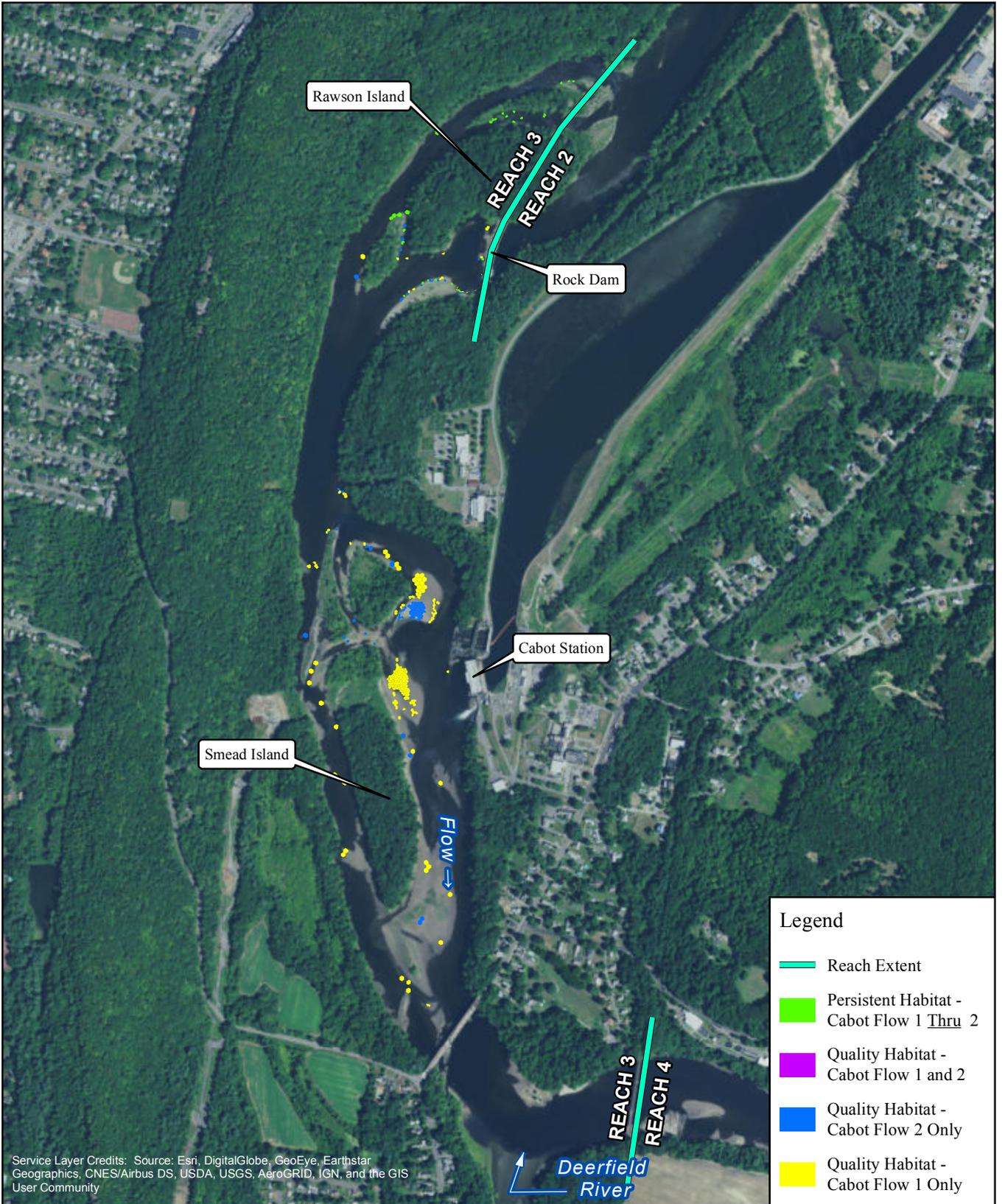
- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

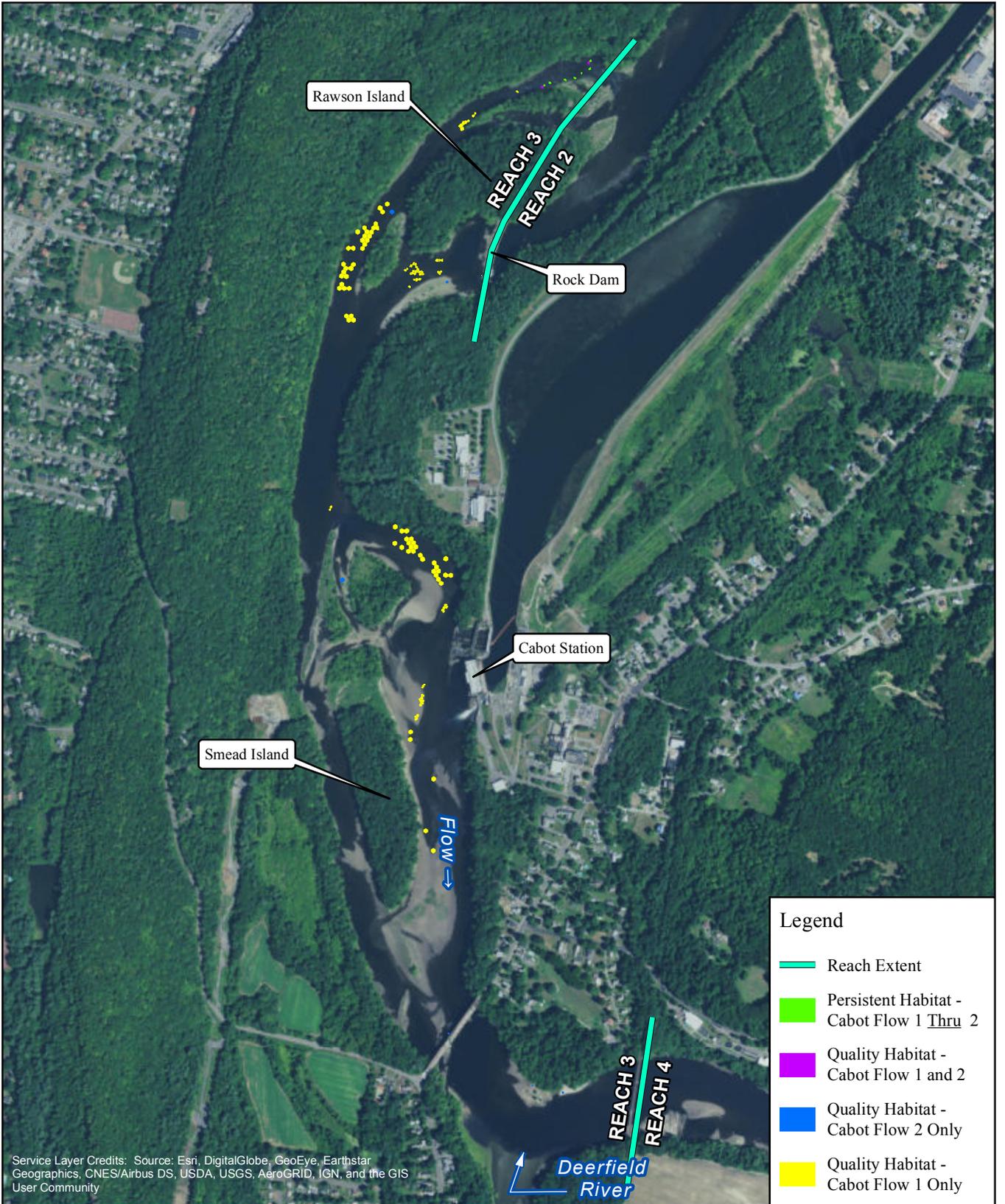
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RELICENSING STUDY 3.3.1

Persistent Habitat
 Tessellated Darter-Juv-Adult
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 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

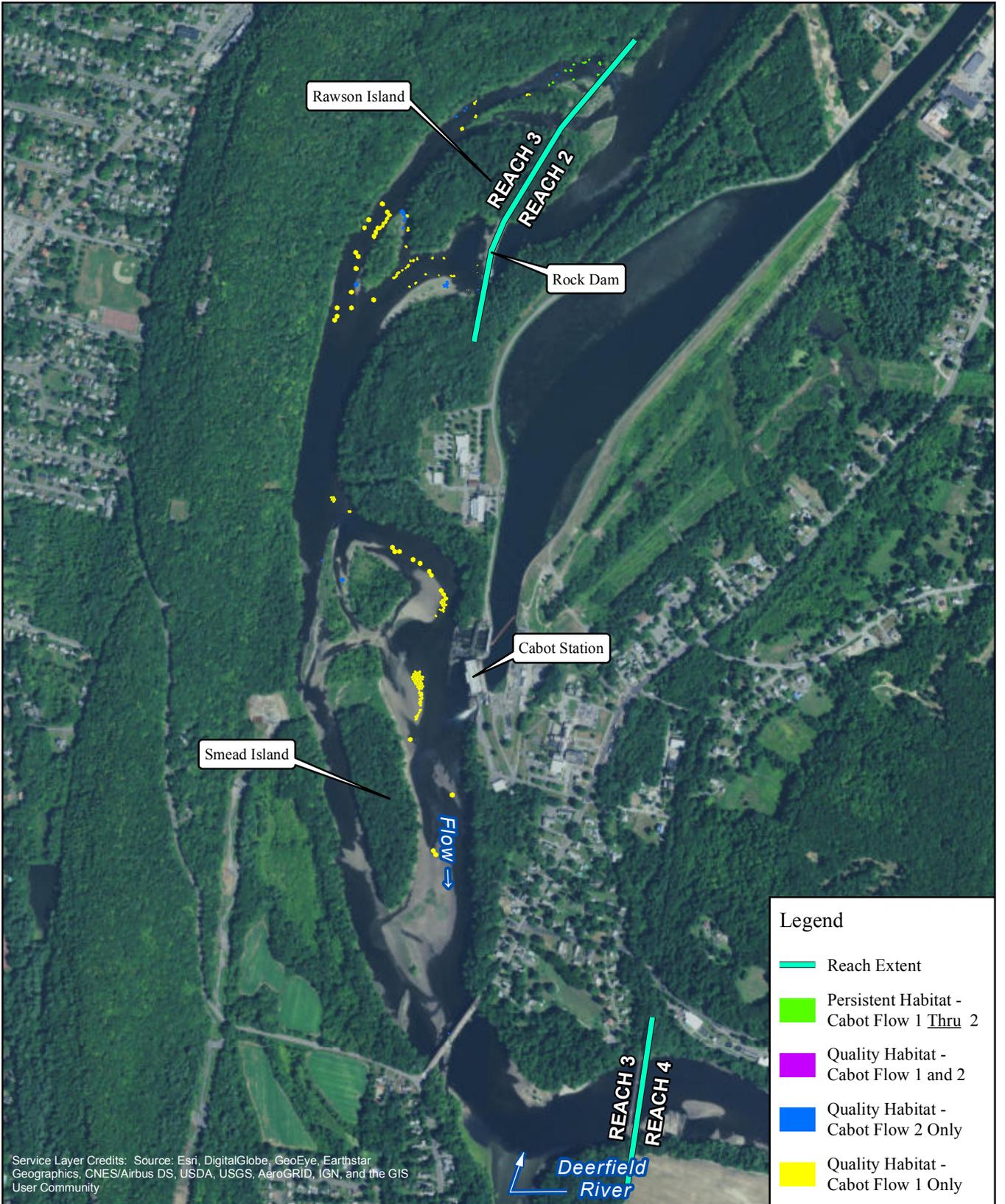
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FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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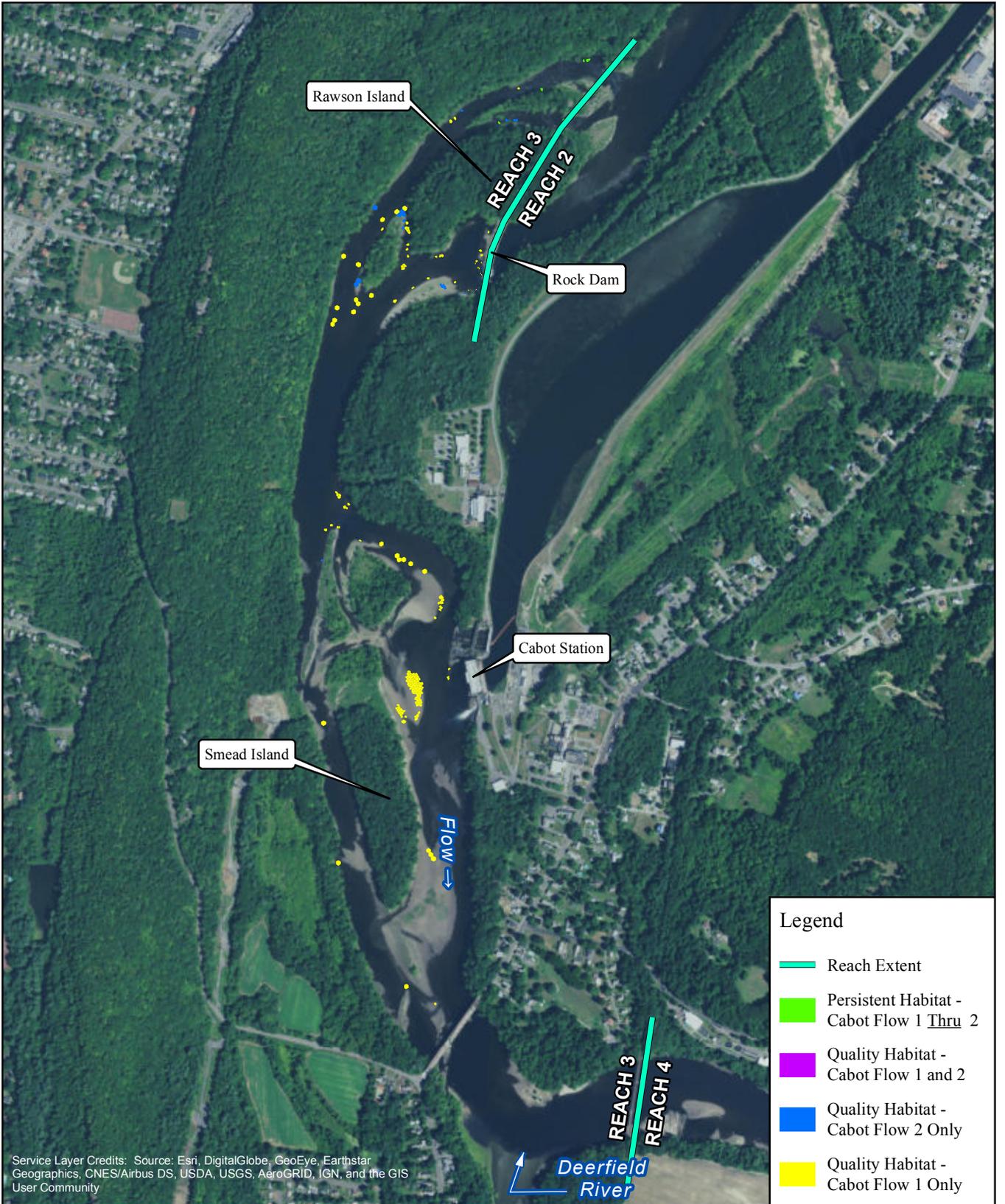
FirstLight™
 Power Resources

N

0 500 1,000 2,000 Feet

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

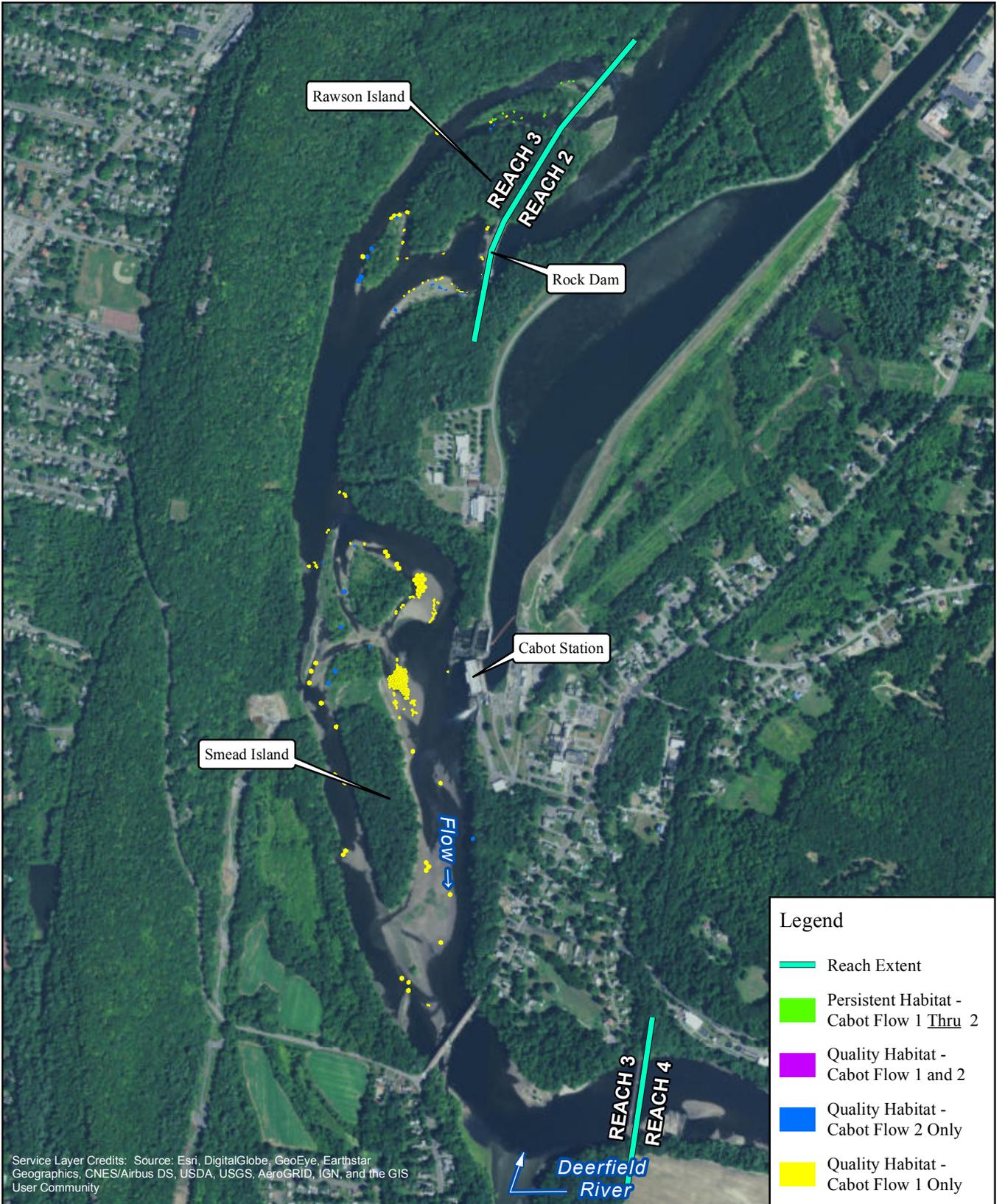
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FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

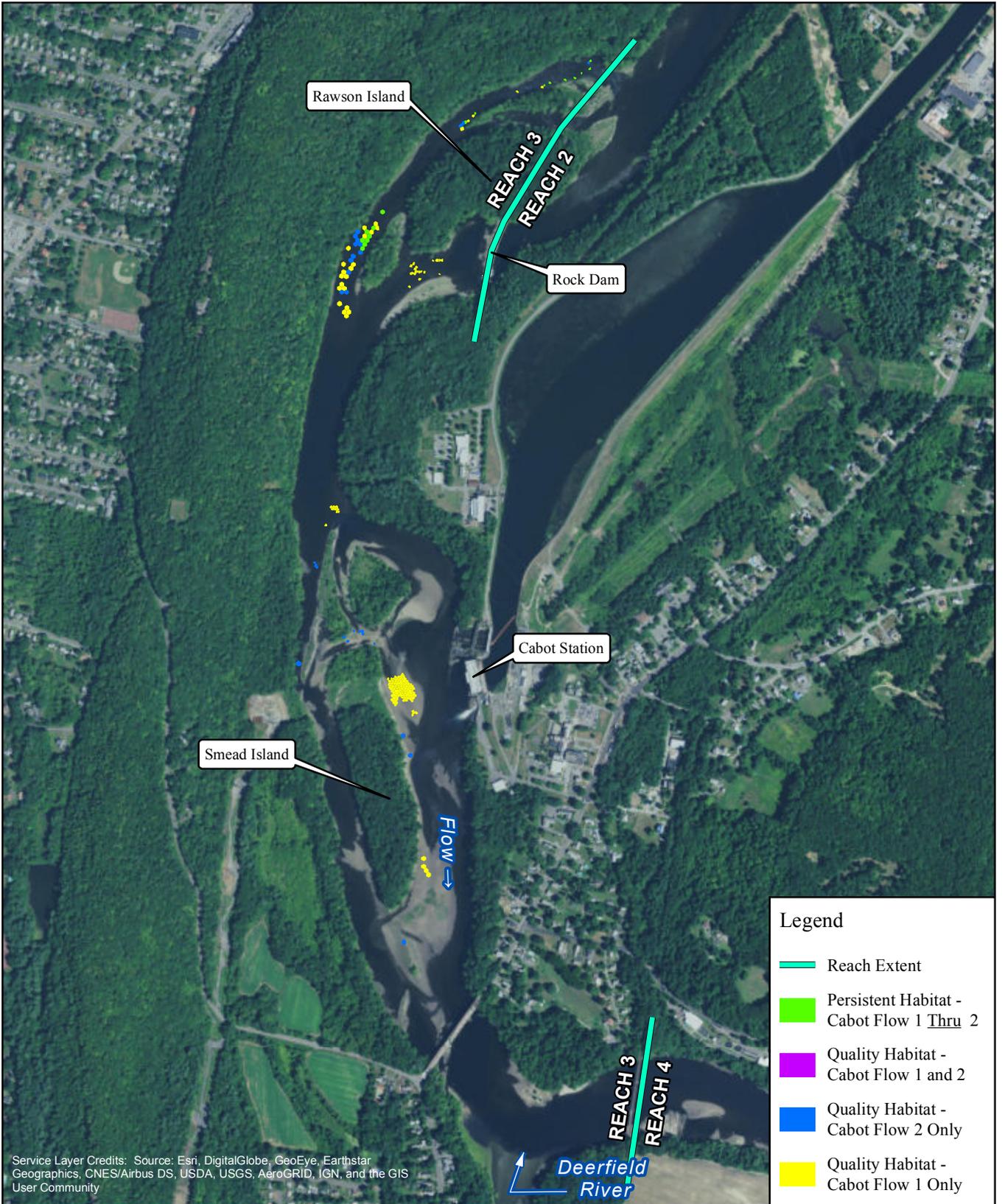


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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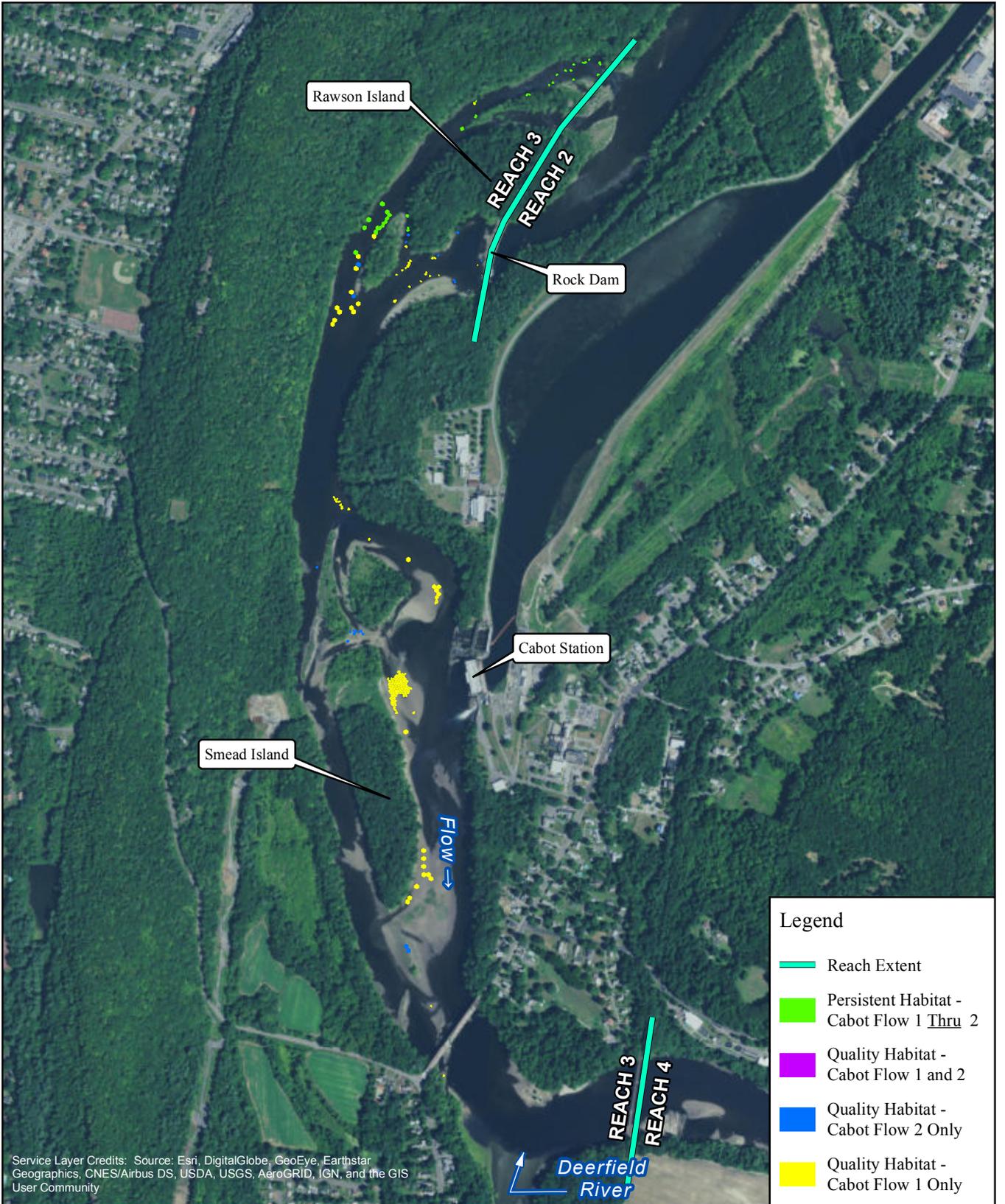
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 Turners Falls Hydroelectric Project No. 1889
 RELICENSING STUDY 3.3.1



Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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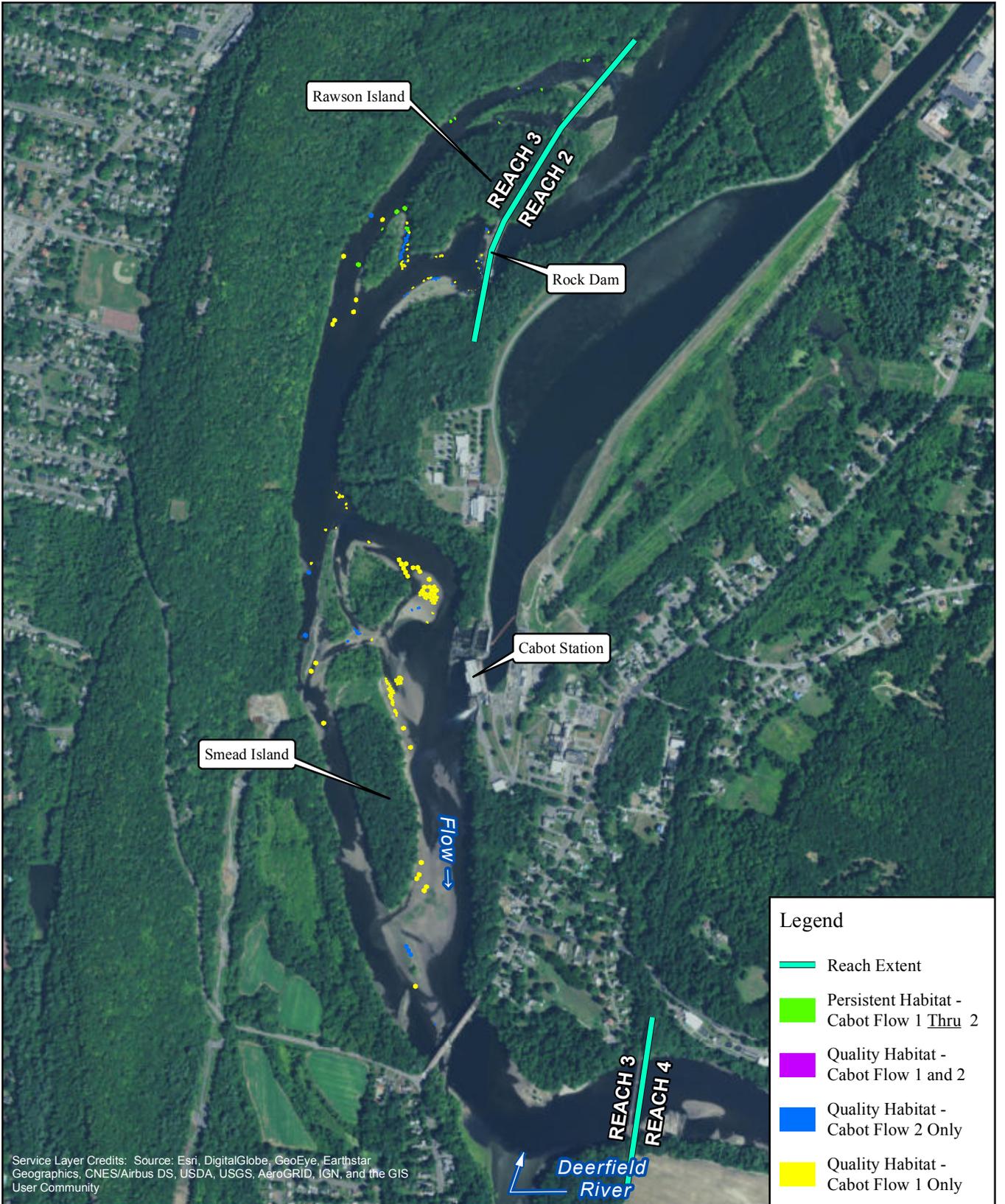
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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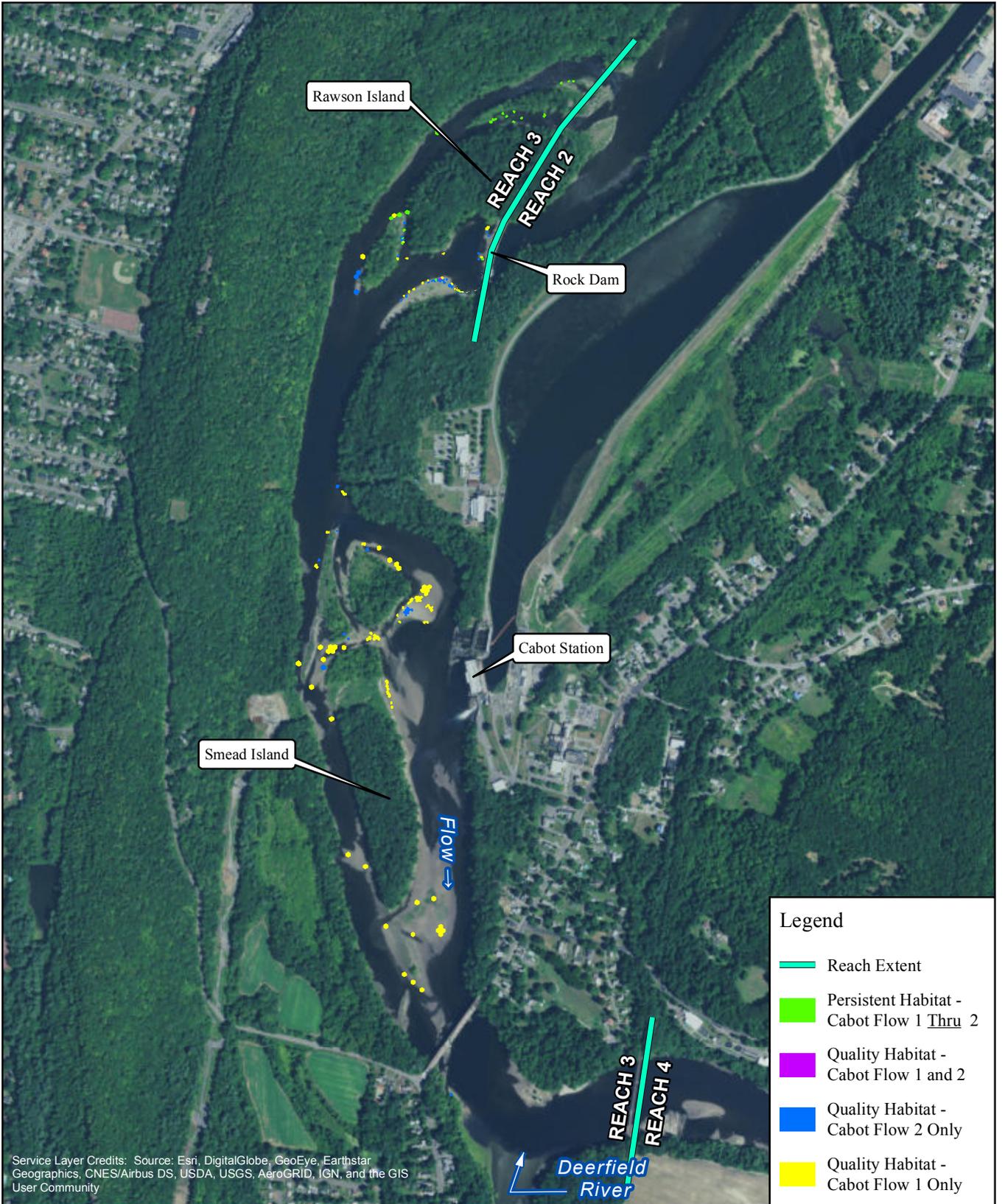
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Northfield Mountain Pumped Storage Project No. 2485
Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
Tessellated Darter-Juv-Adult
Bypass Flow: 1000 cfs
Cabot Flow 1: 4500 cfs
Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

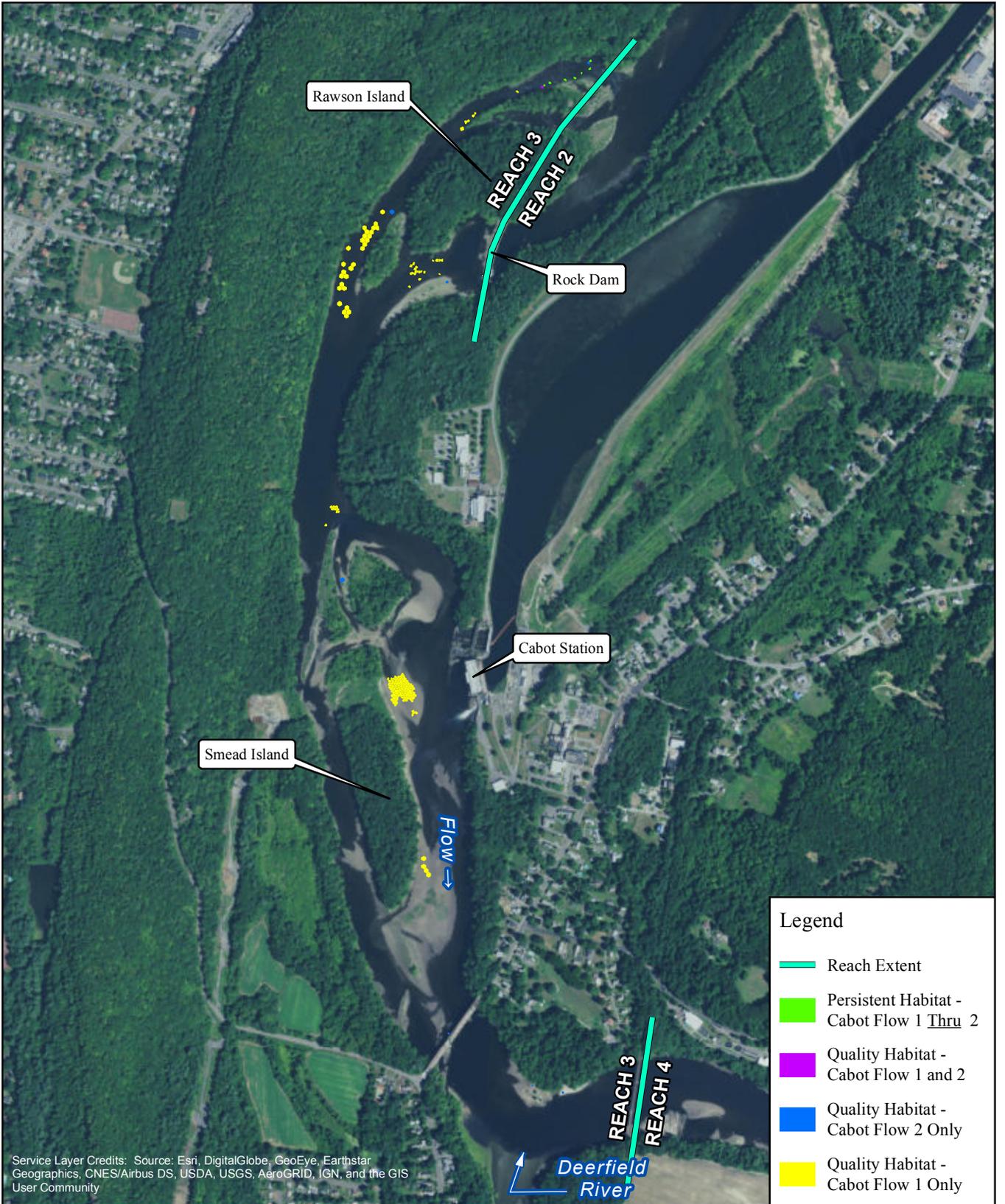


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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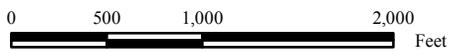


Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

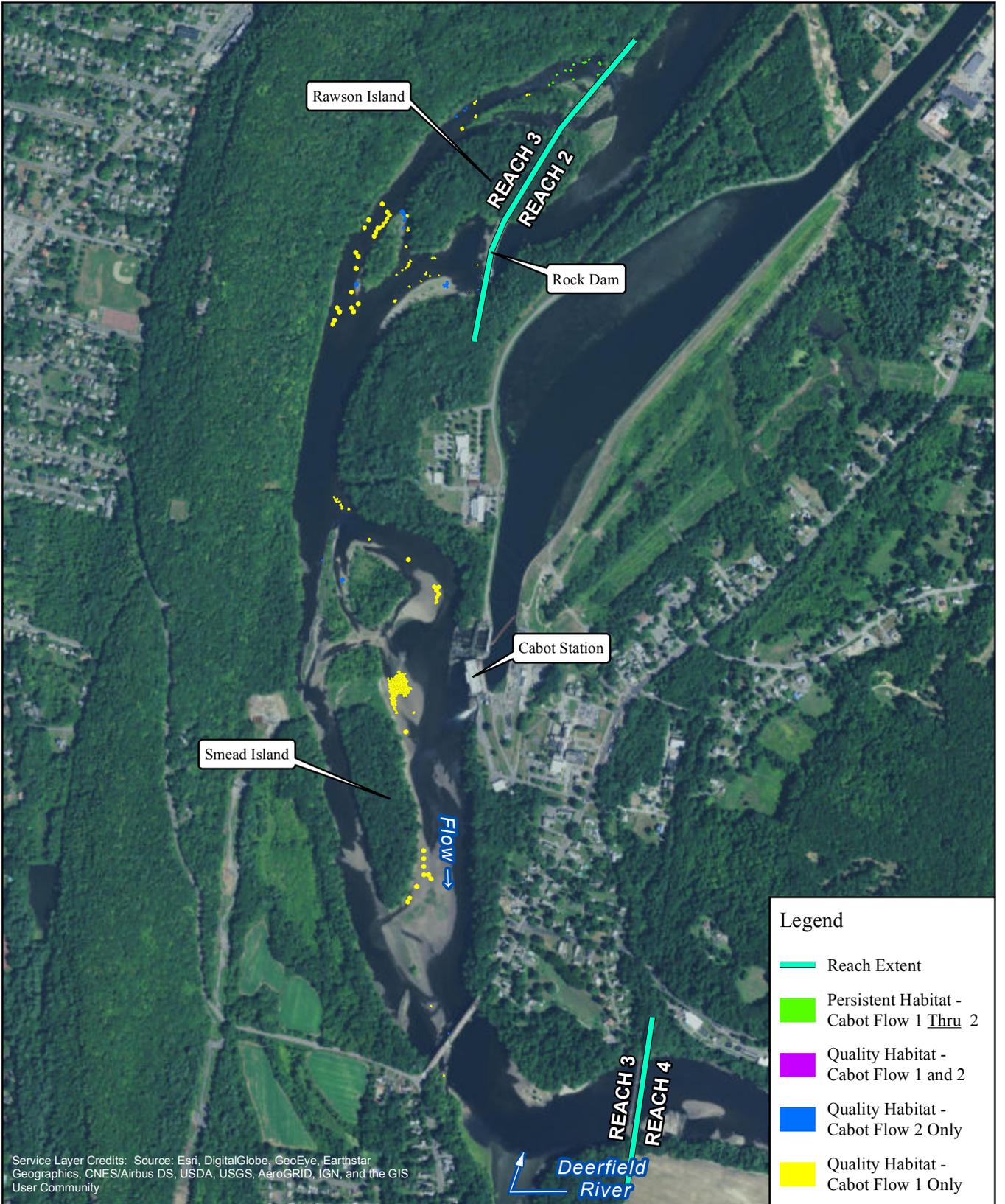


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

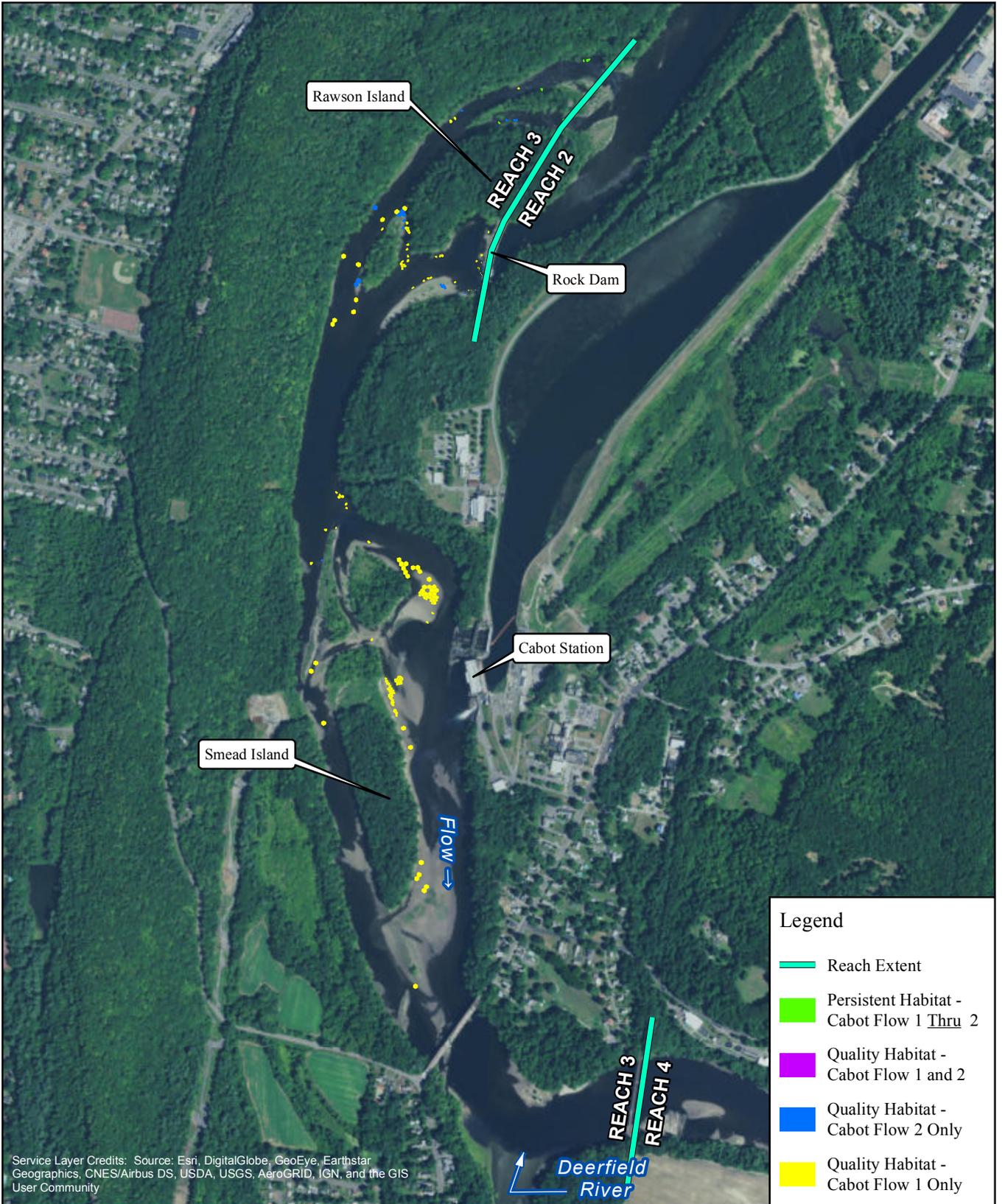


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

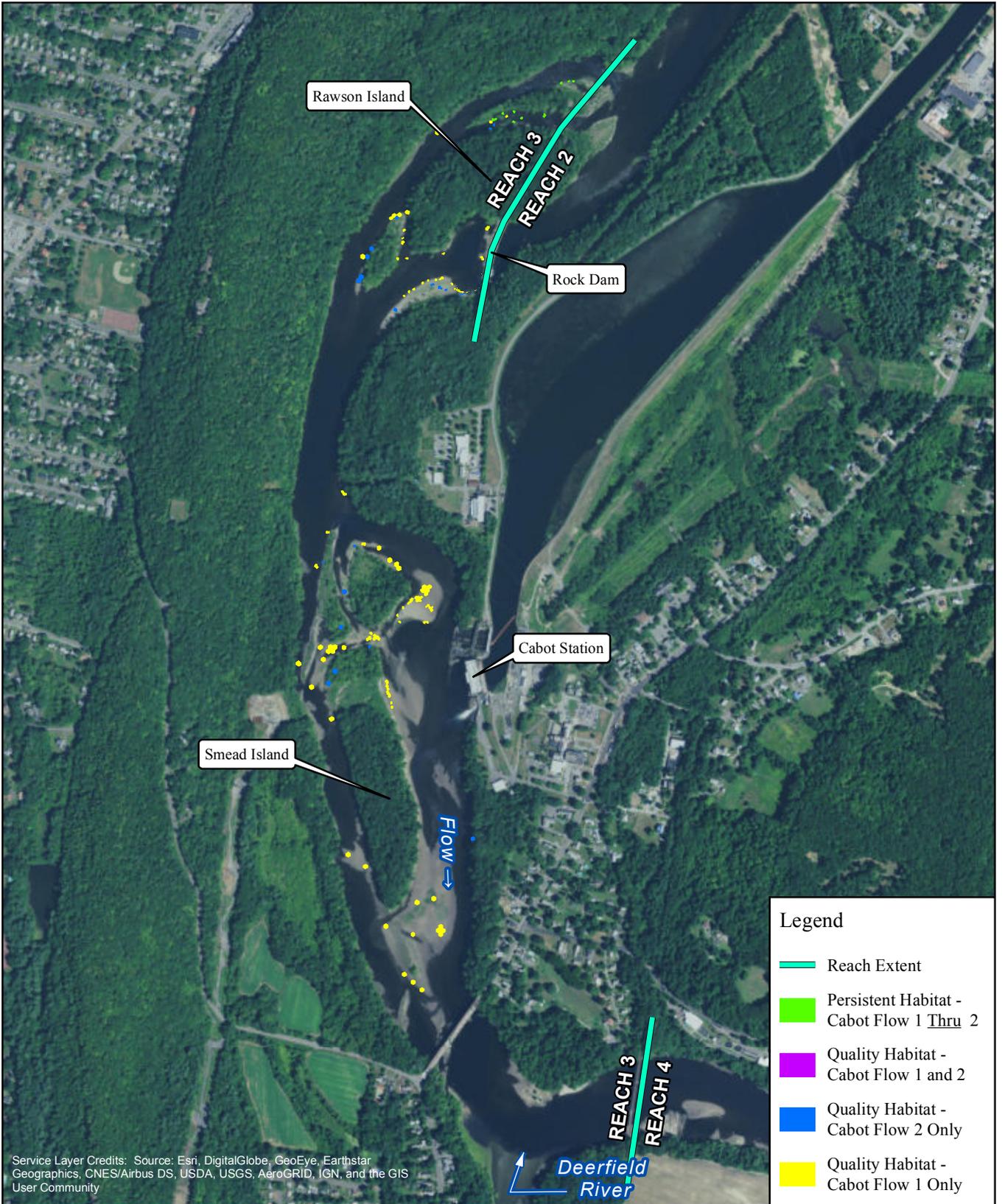
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Tessellated Darter-Juv-Adult
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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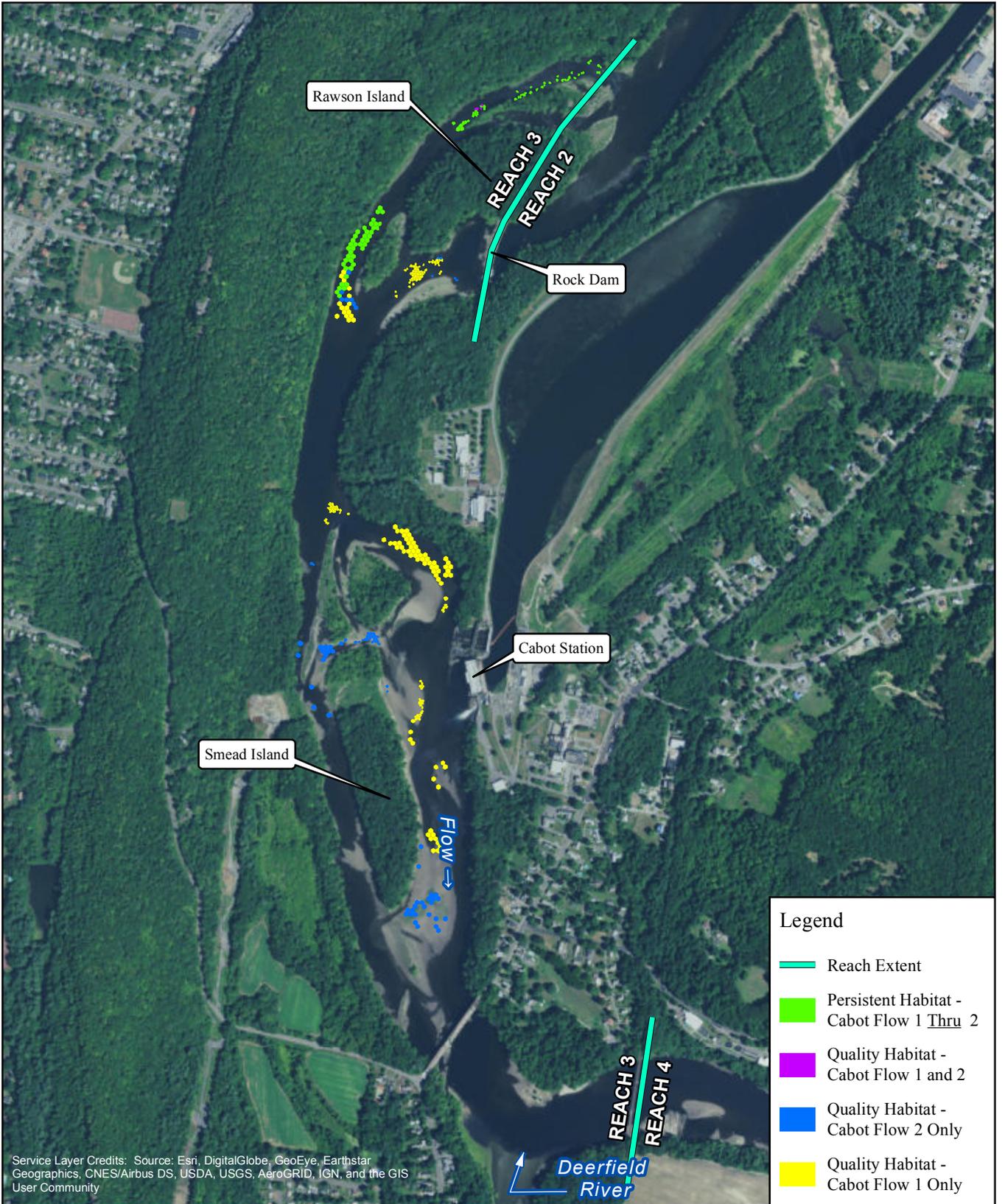
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Persistent Habitat
Tessellated Darter-Juv-Adult
Bypass Flow: 2000 cfs
Cabot Flow 1: 4500 cfs
Cabot Flow 2: 14000 cfs



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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

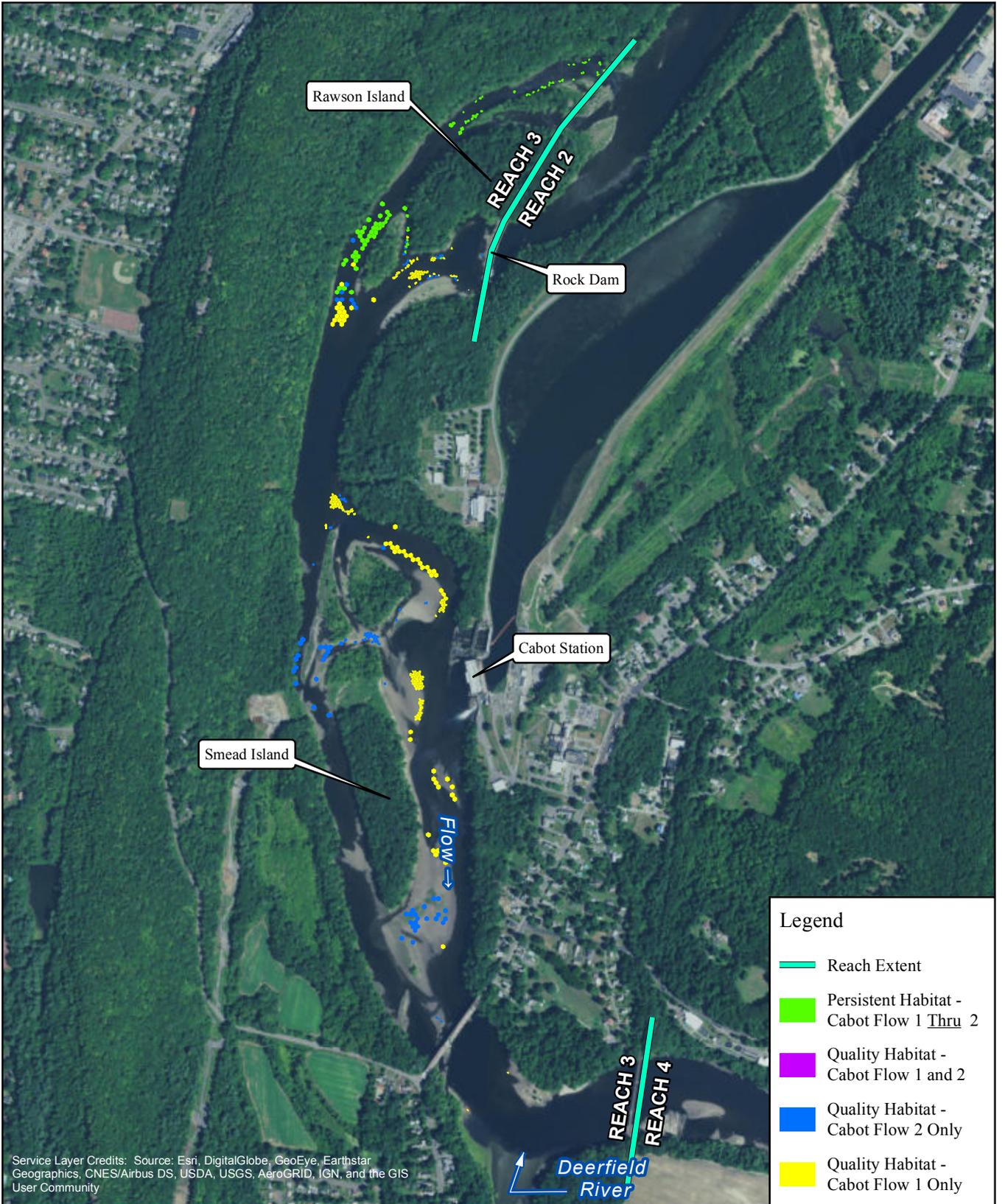


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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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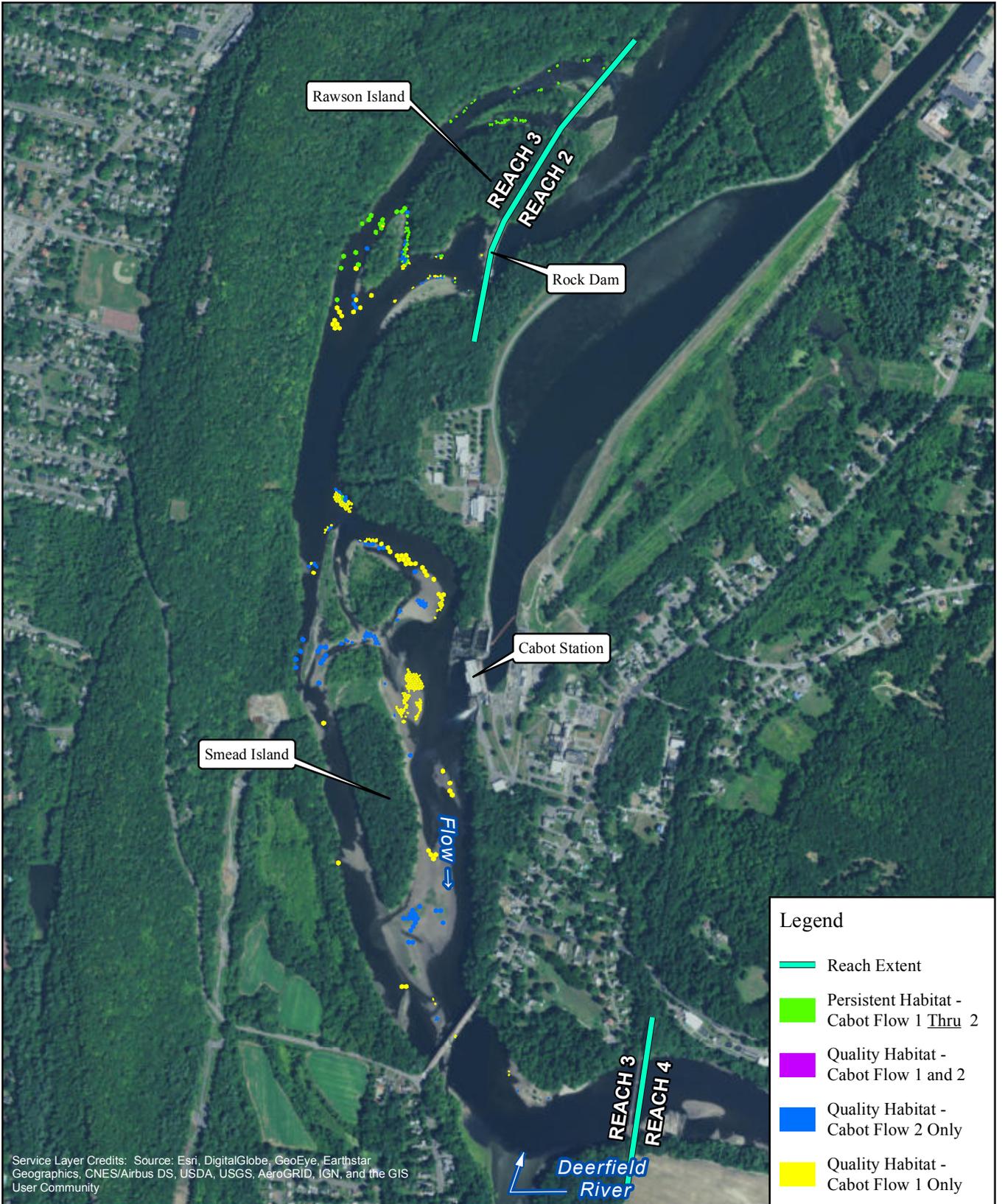
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Persistent Habitat
Longnose Dace-Juvenile
Bypass Flow: 500 cfs
Cabot Flow 1: 2500 cfs
Cabot Flow 2: 7000 cfs

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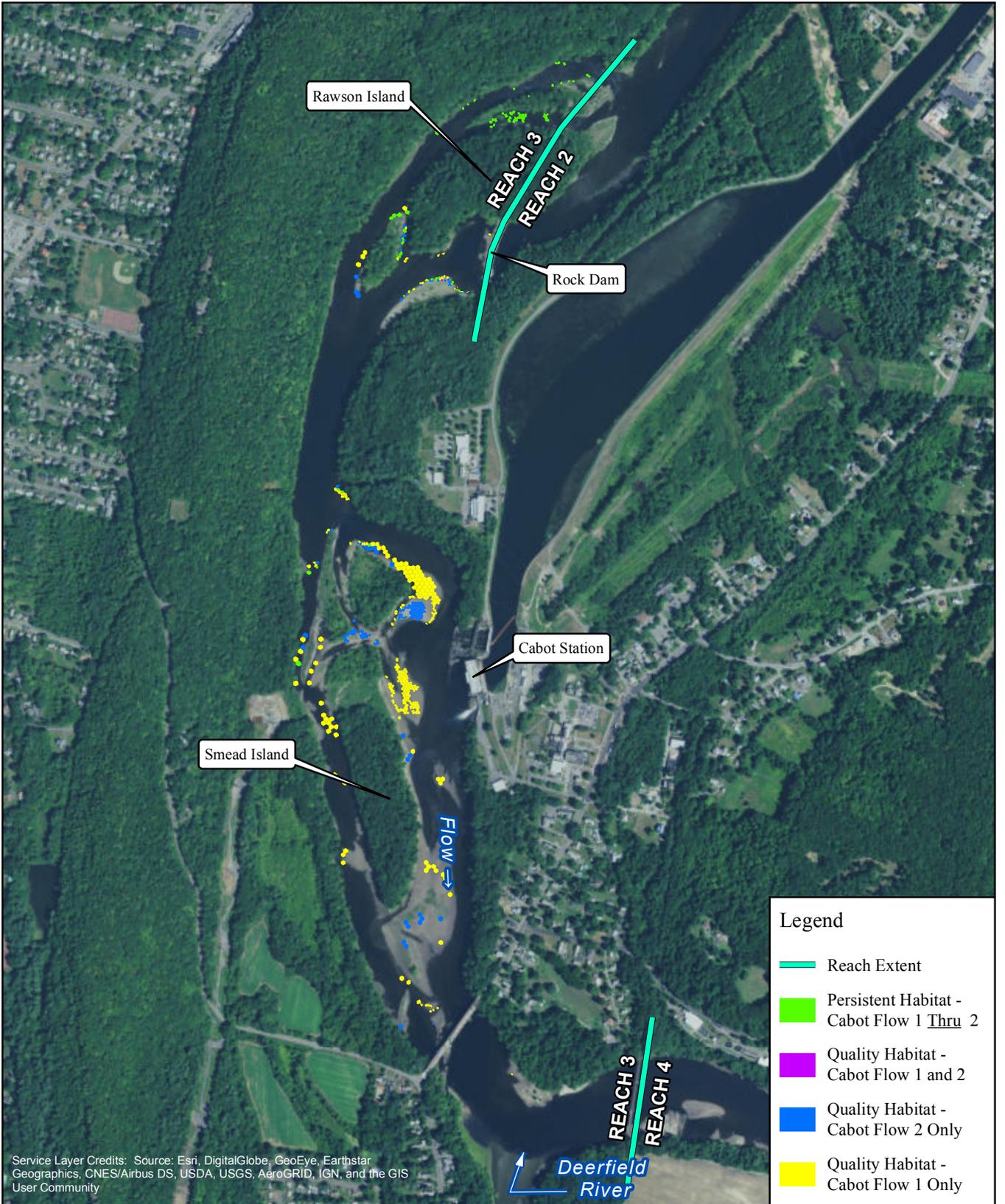
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 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

N

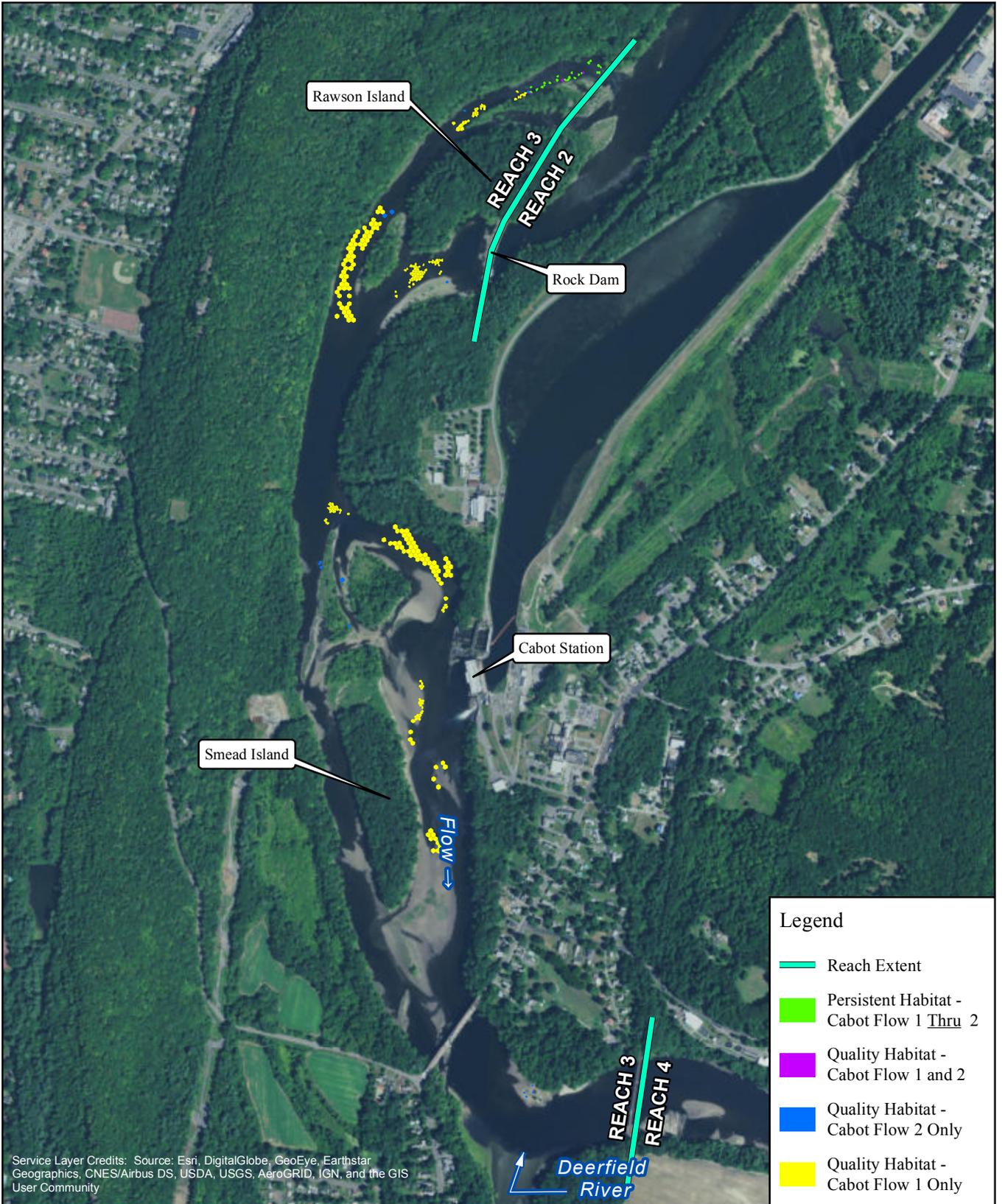
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Northfield Mountain Pumped Storage Project No. 2485
Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1

Persistent Habitat
Longnose Dace-Juvenile
Bypass Flow: 2000 cfs
Cabot Flow 1: 2500 cfs
Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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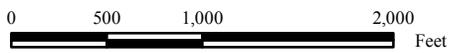


Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

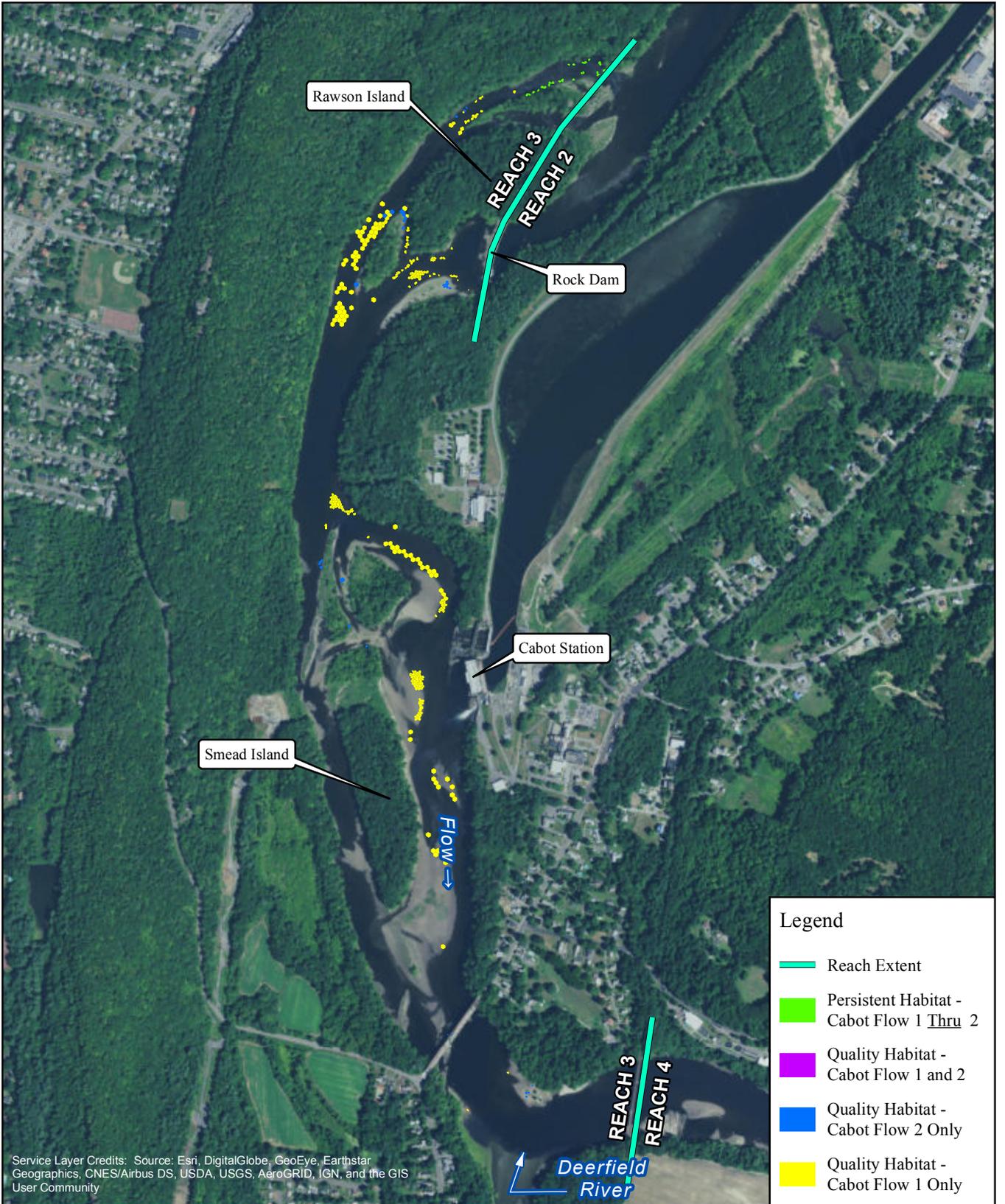


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 Turners Falls Hydroelectric Project No. 1889
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Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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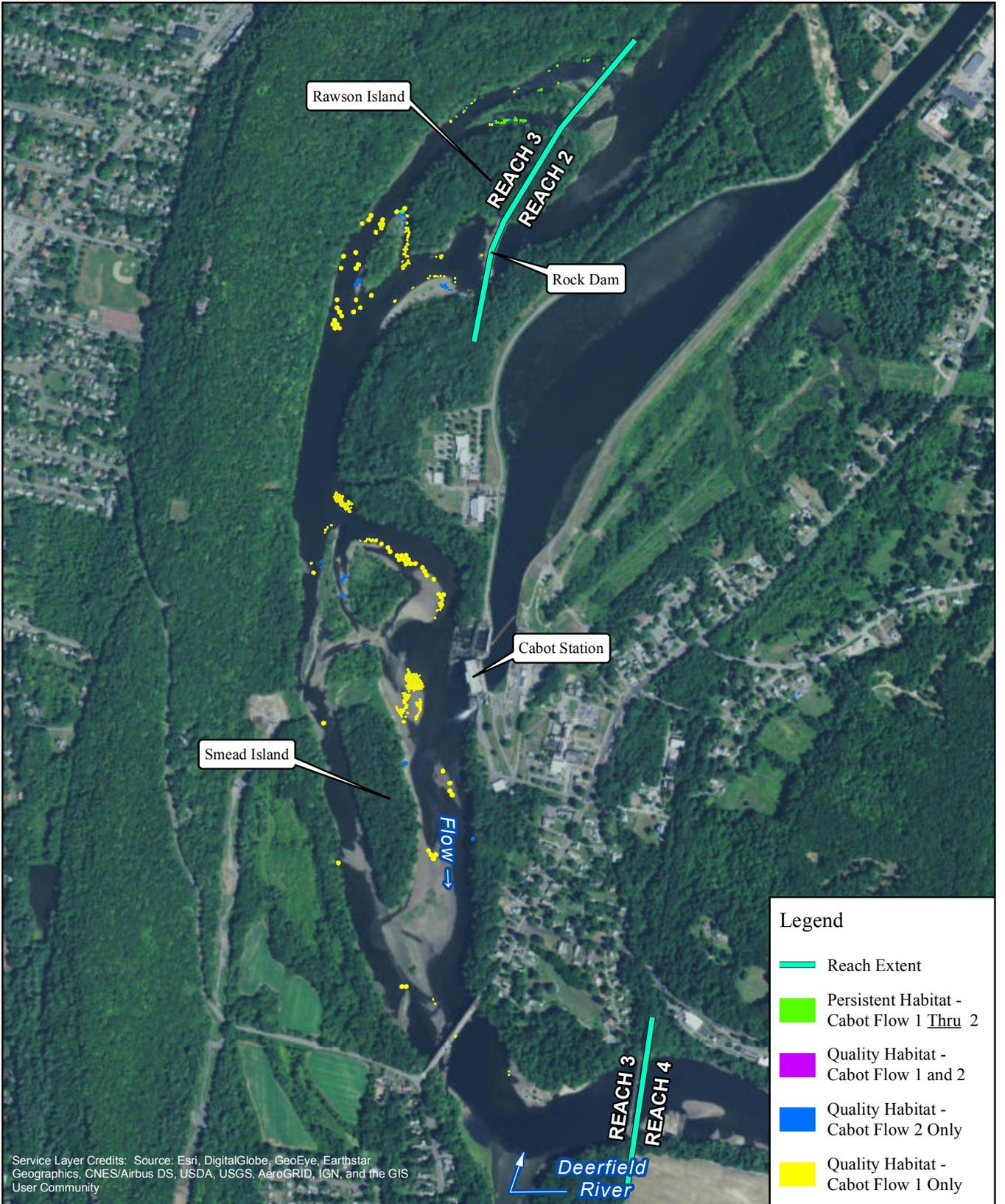
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 Northfield Mountain Pumped Storage Project No. 2485
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Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

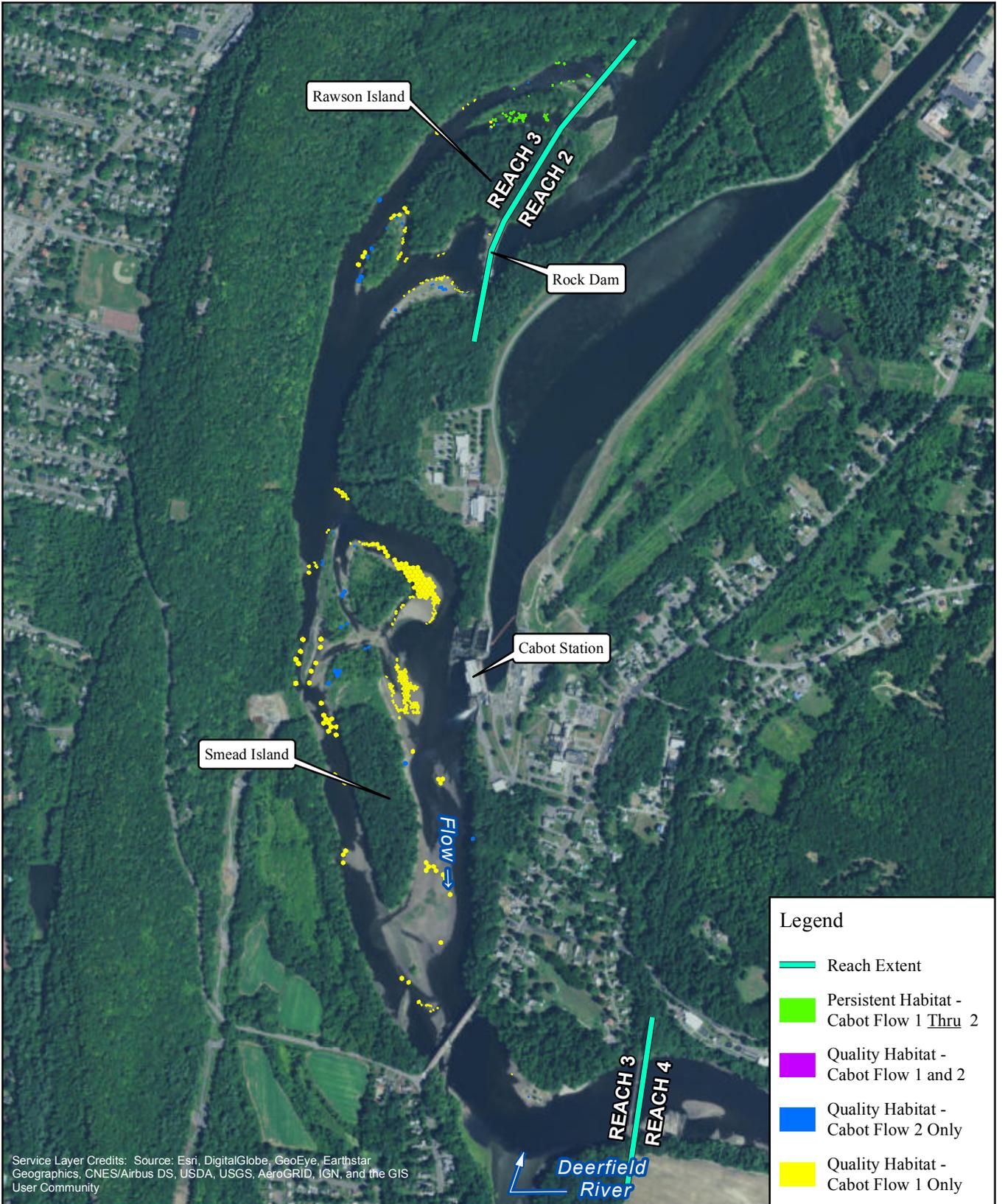


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
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Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



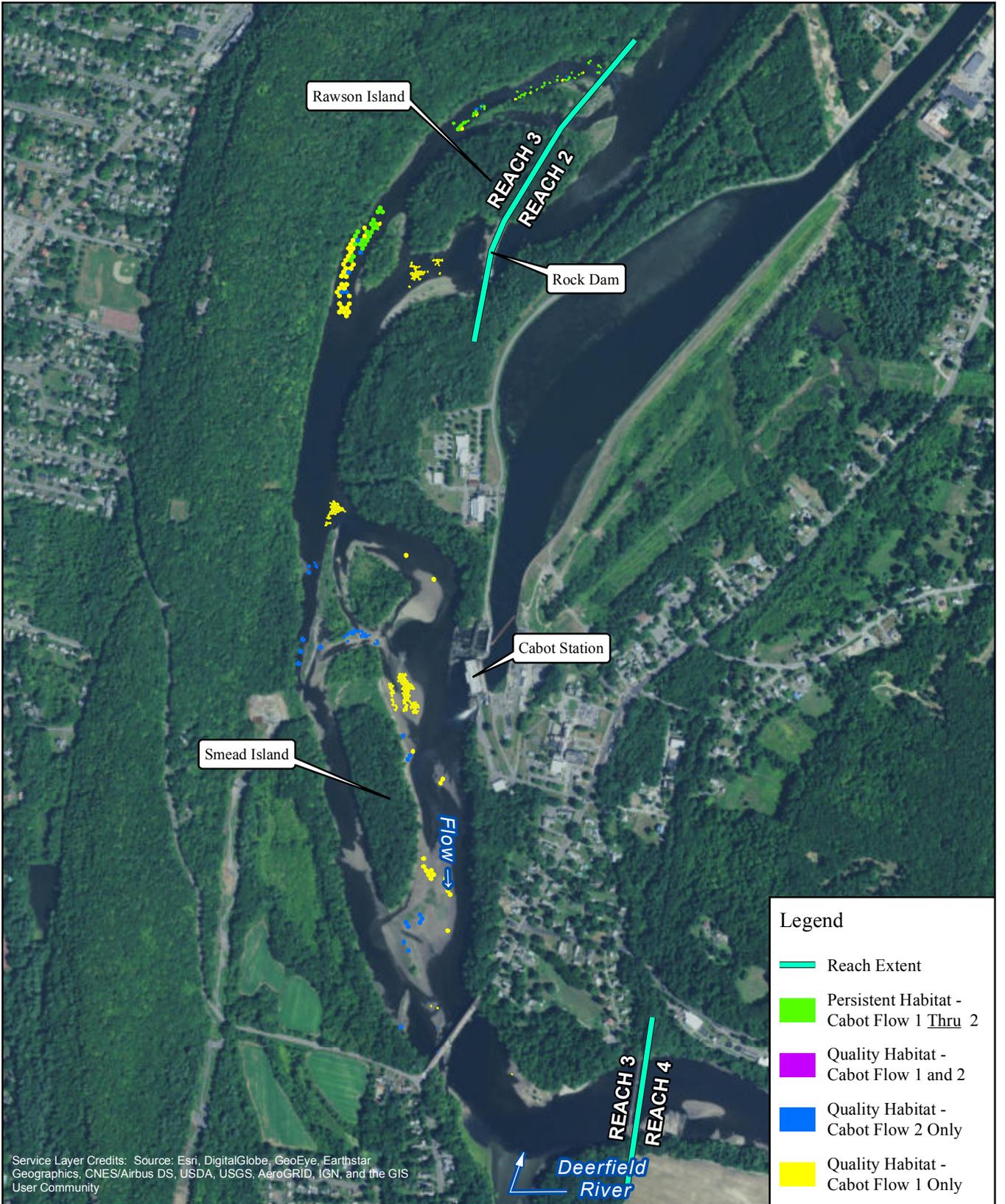
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 Turners Falls Hydroelectric Project No. 1889

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Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 14000 cfs

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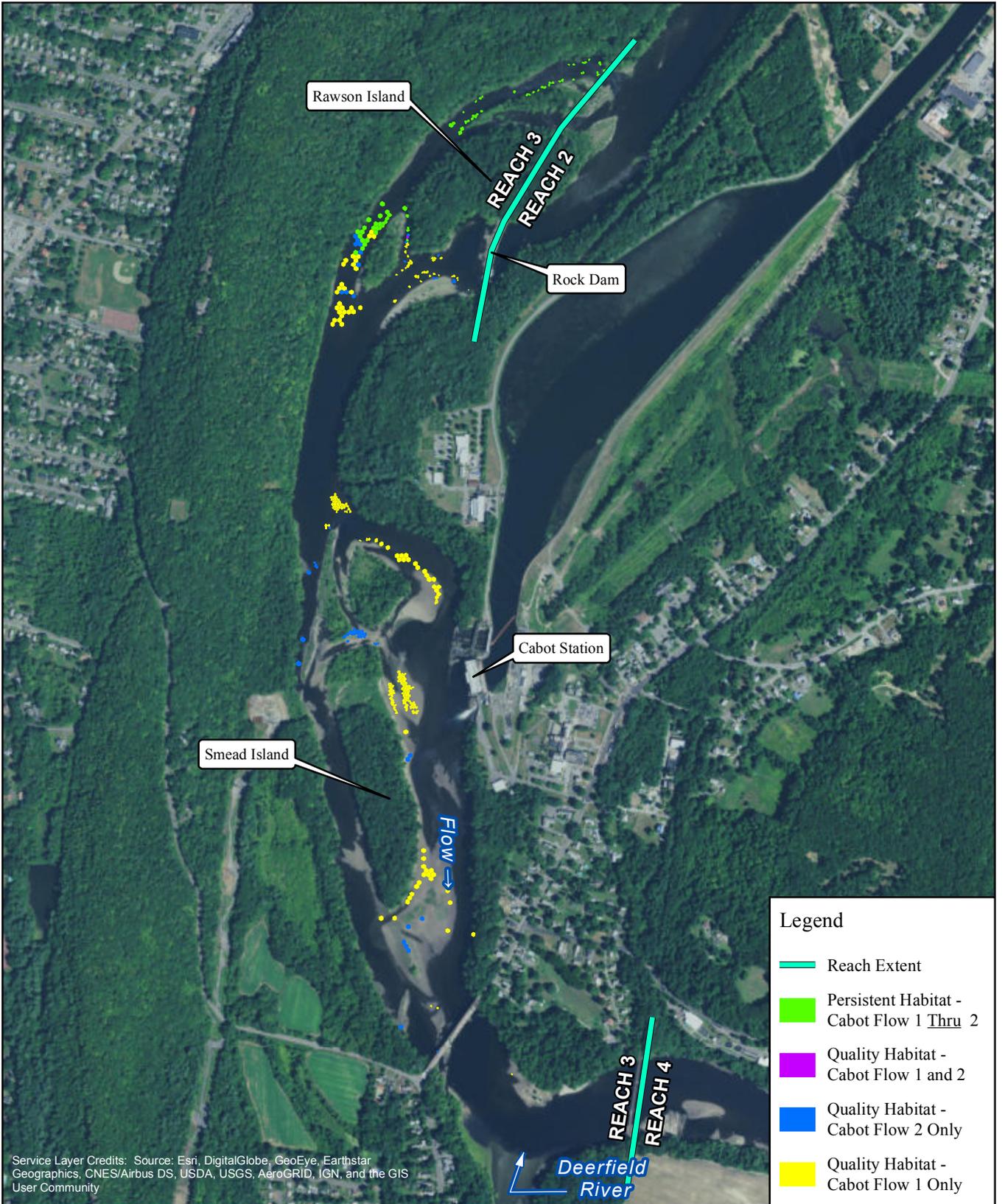
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0 500 1,000 2,000 Feet

Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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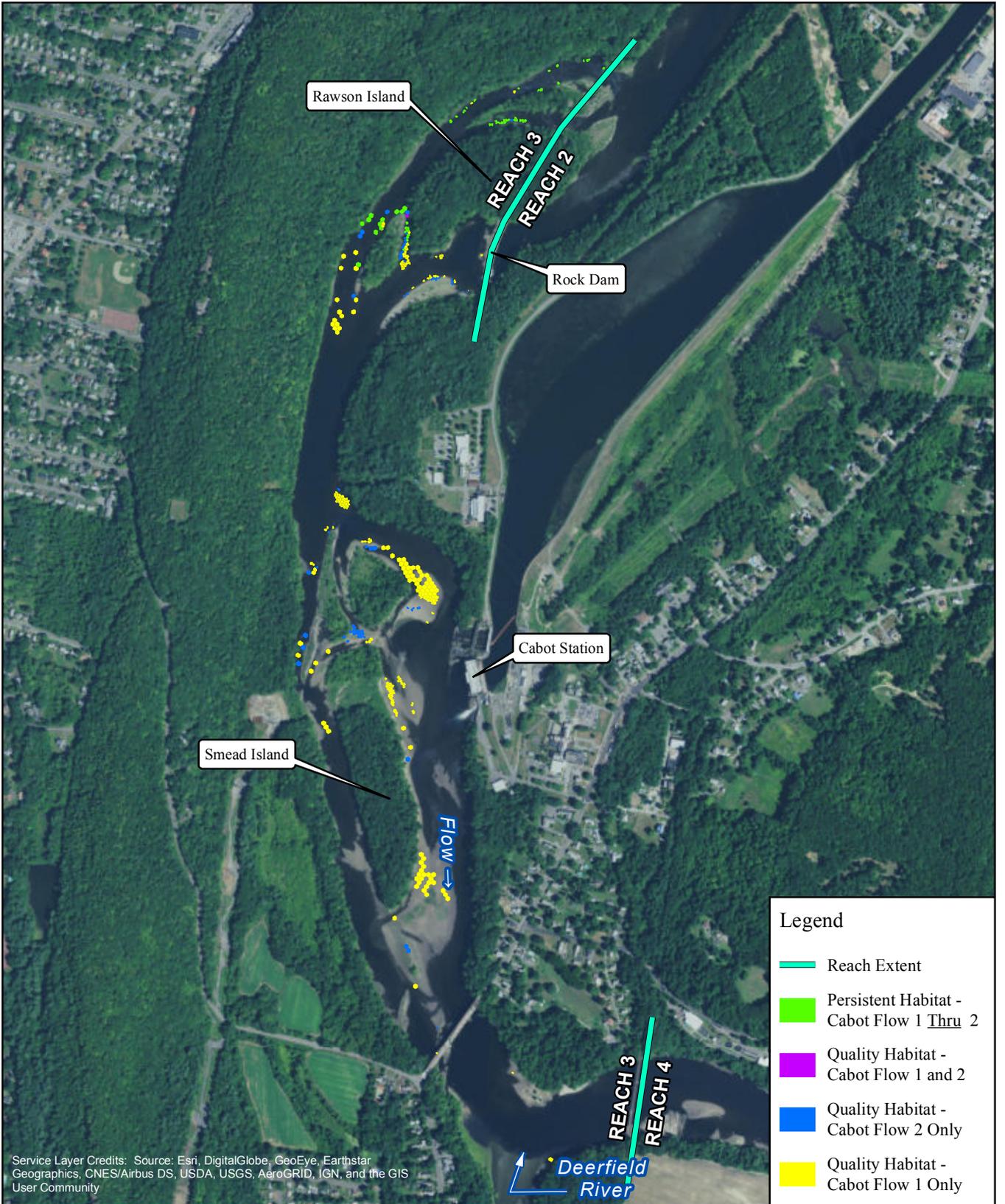
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 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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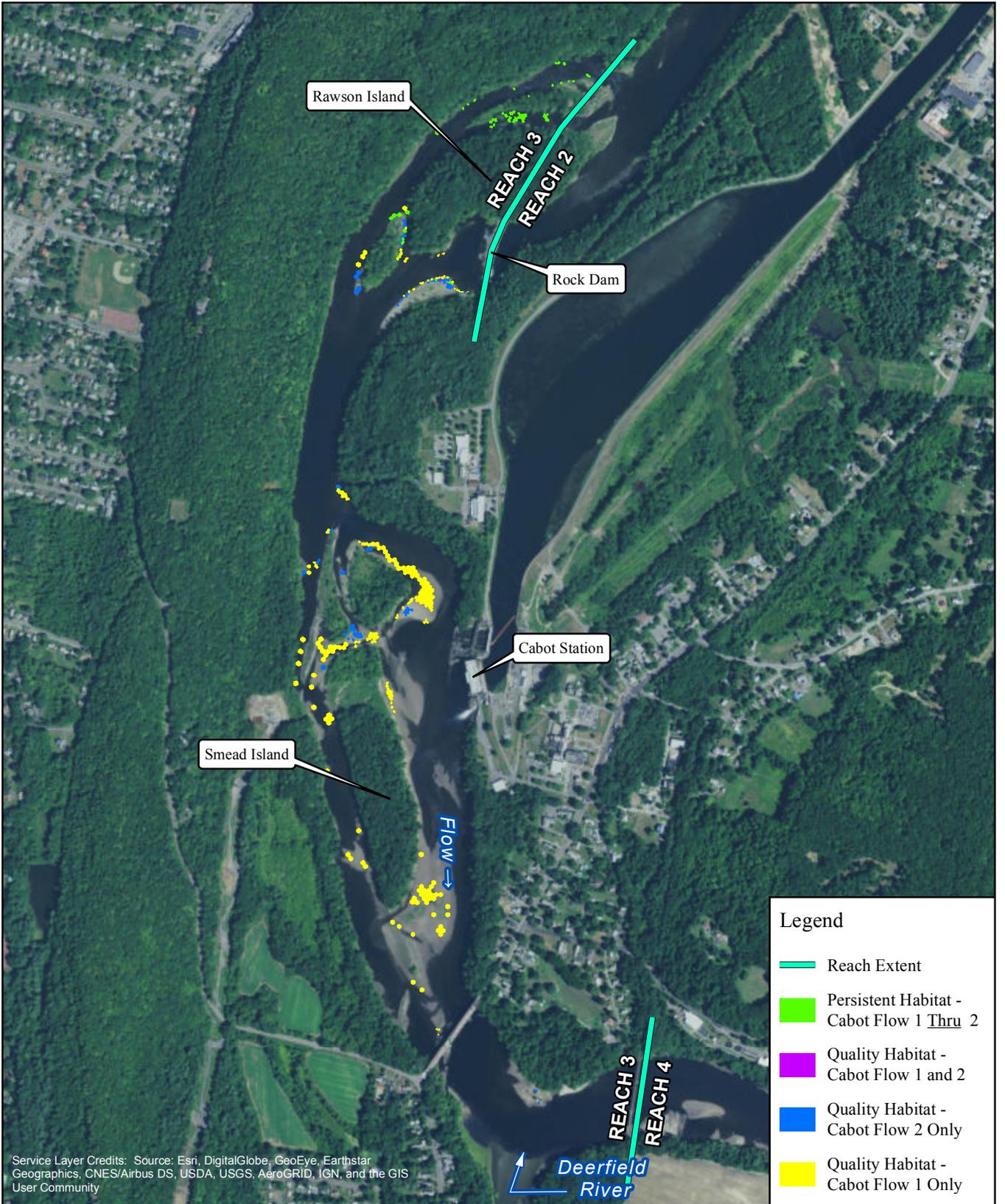
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Turners Falls Hydroelectric Project No. 1889

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Persistent Habitat
Longnose Dace-Juvenile
Bypass Flow: 1000 cfs
Cabot Flow 1: 4500 cfs
Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



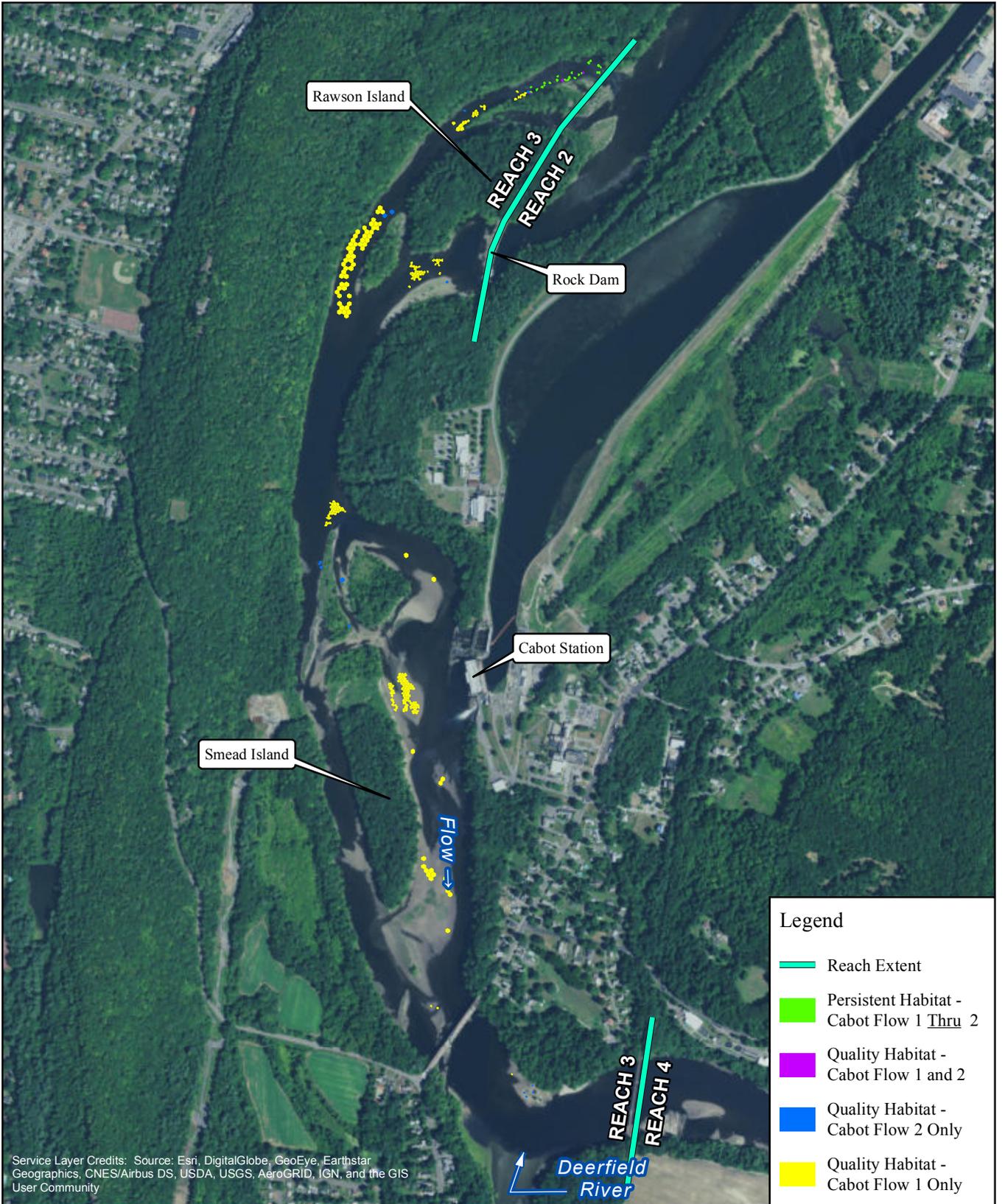
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 Turners Falls Hydroelectric Project No. 1889

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Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

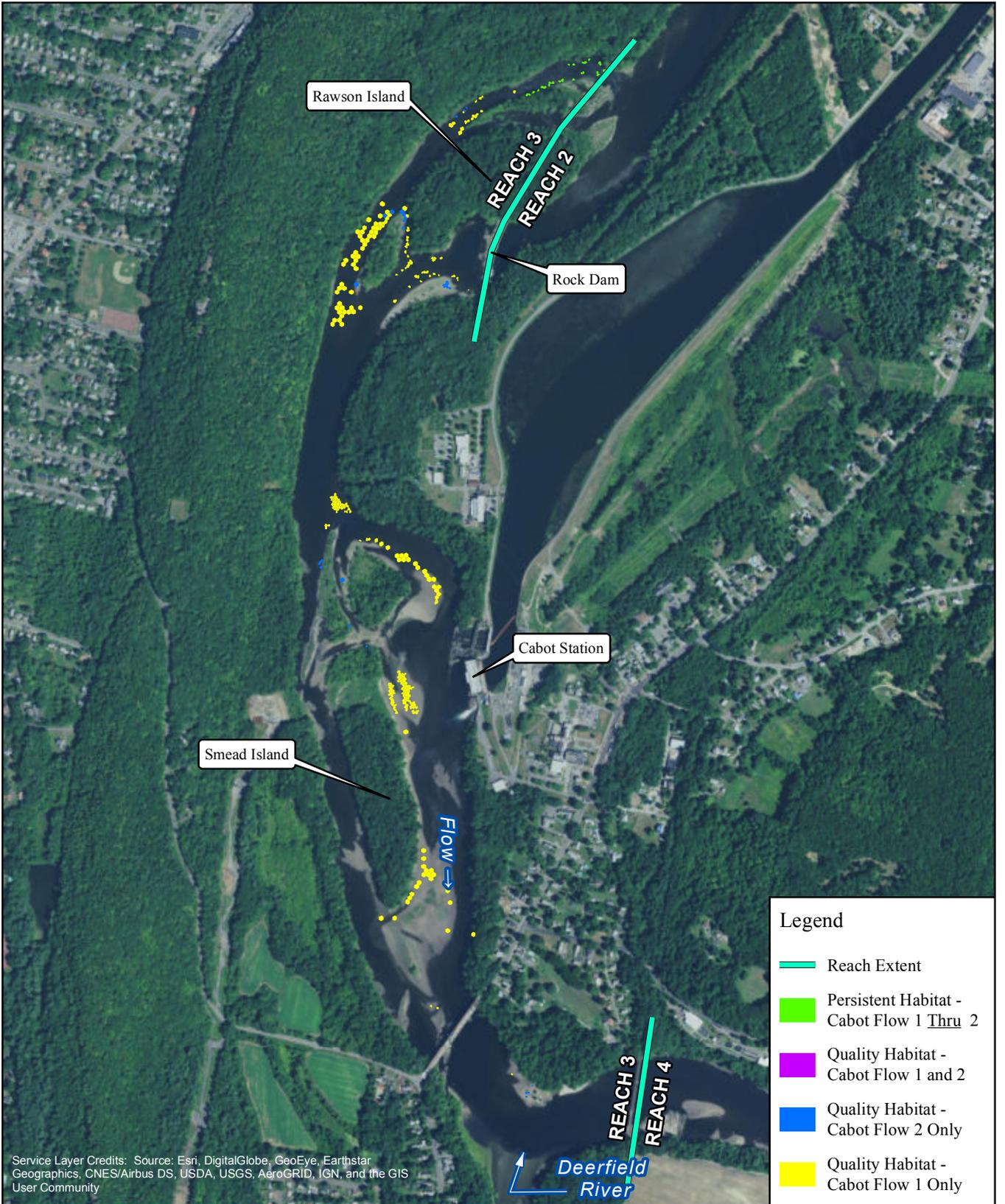


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
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- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

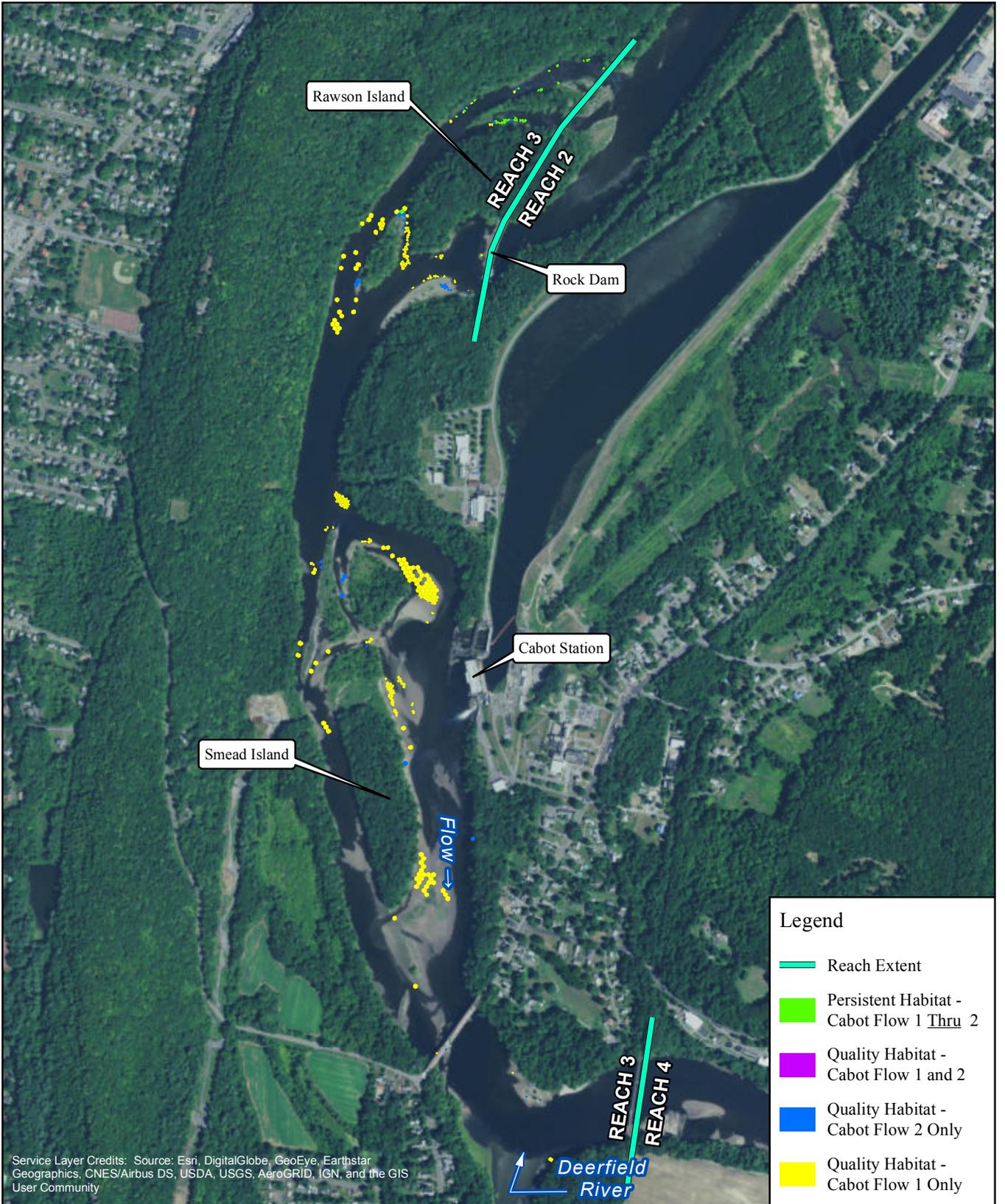


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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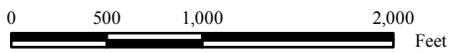


Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

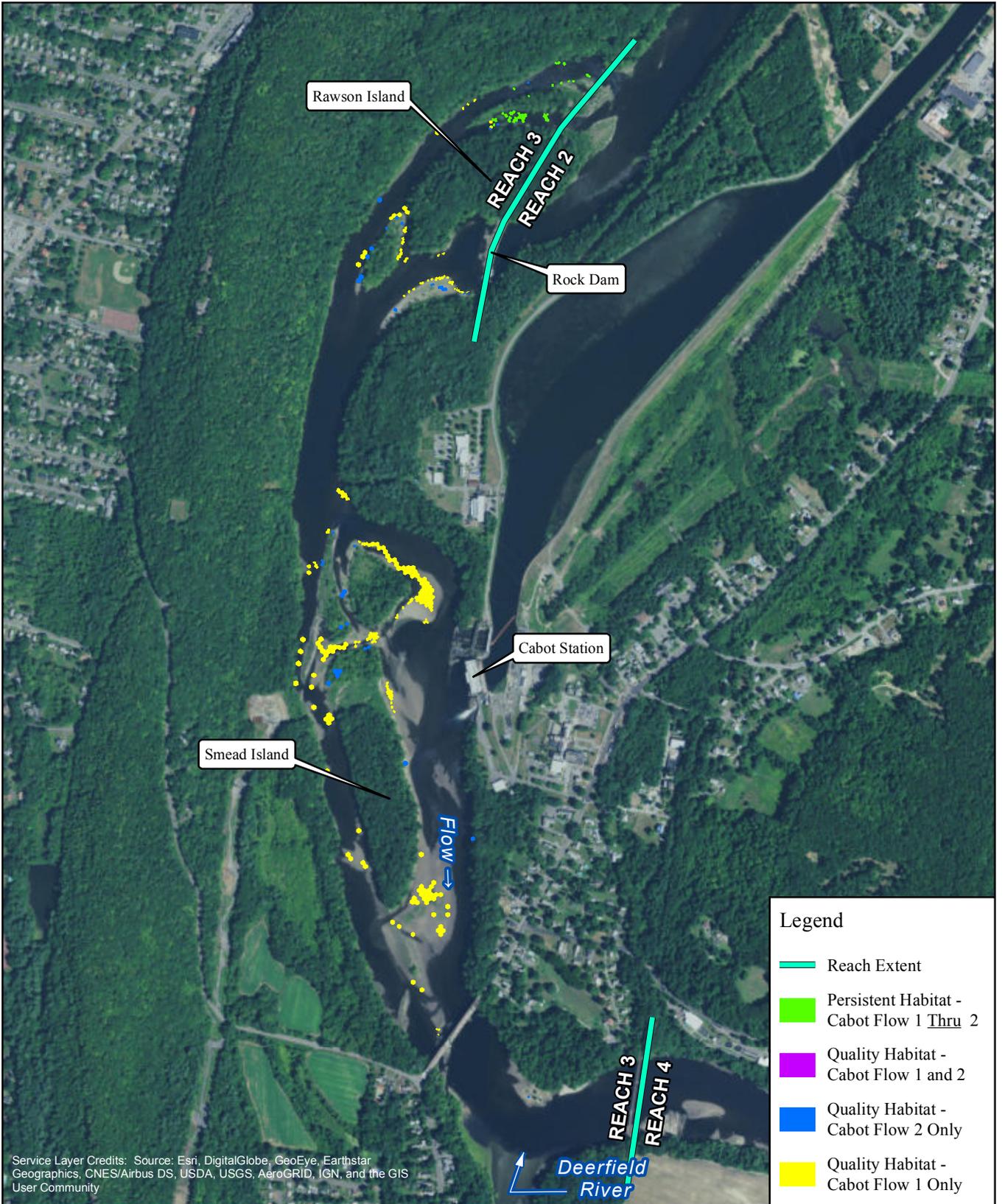


FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

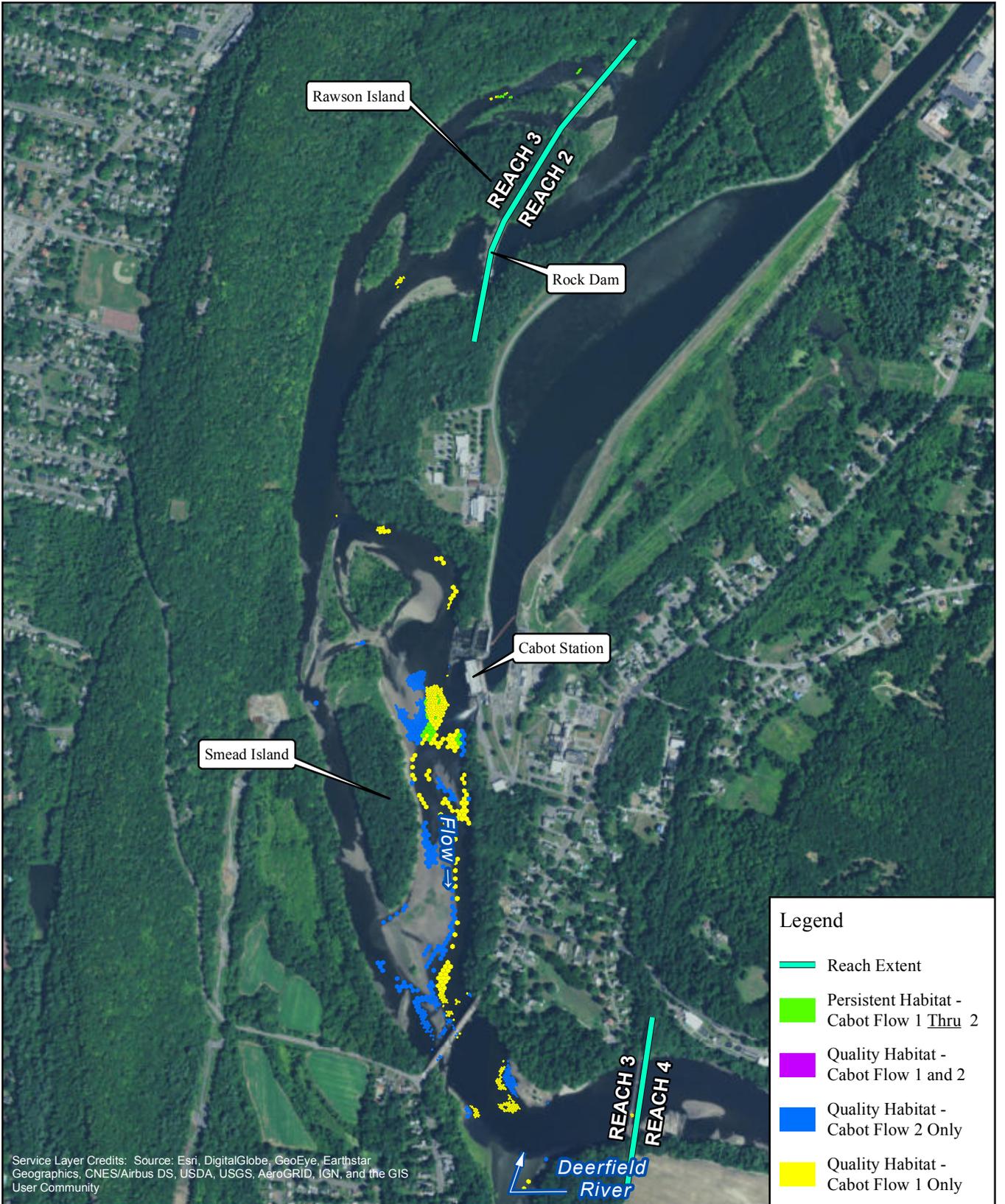


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Longnose Dace-Juvenile
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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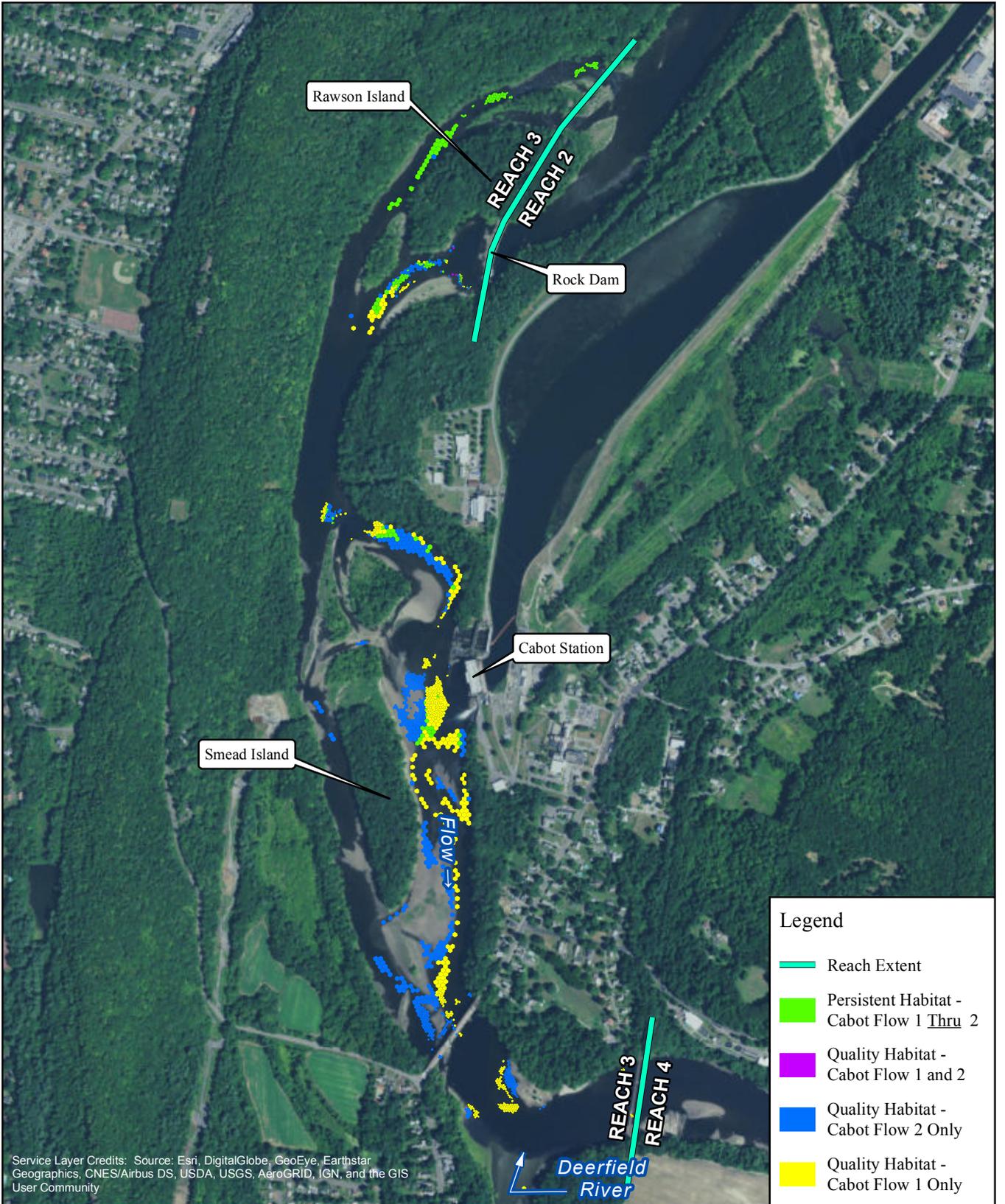


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
 RELICENSING STUDY 3.3.1



Persistent Habitat
 Deep-Fast Guild-
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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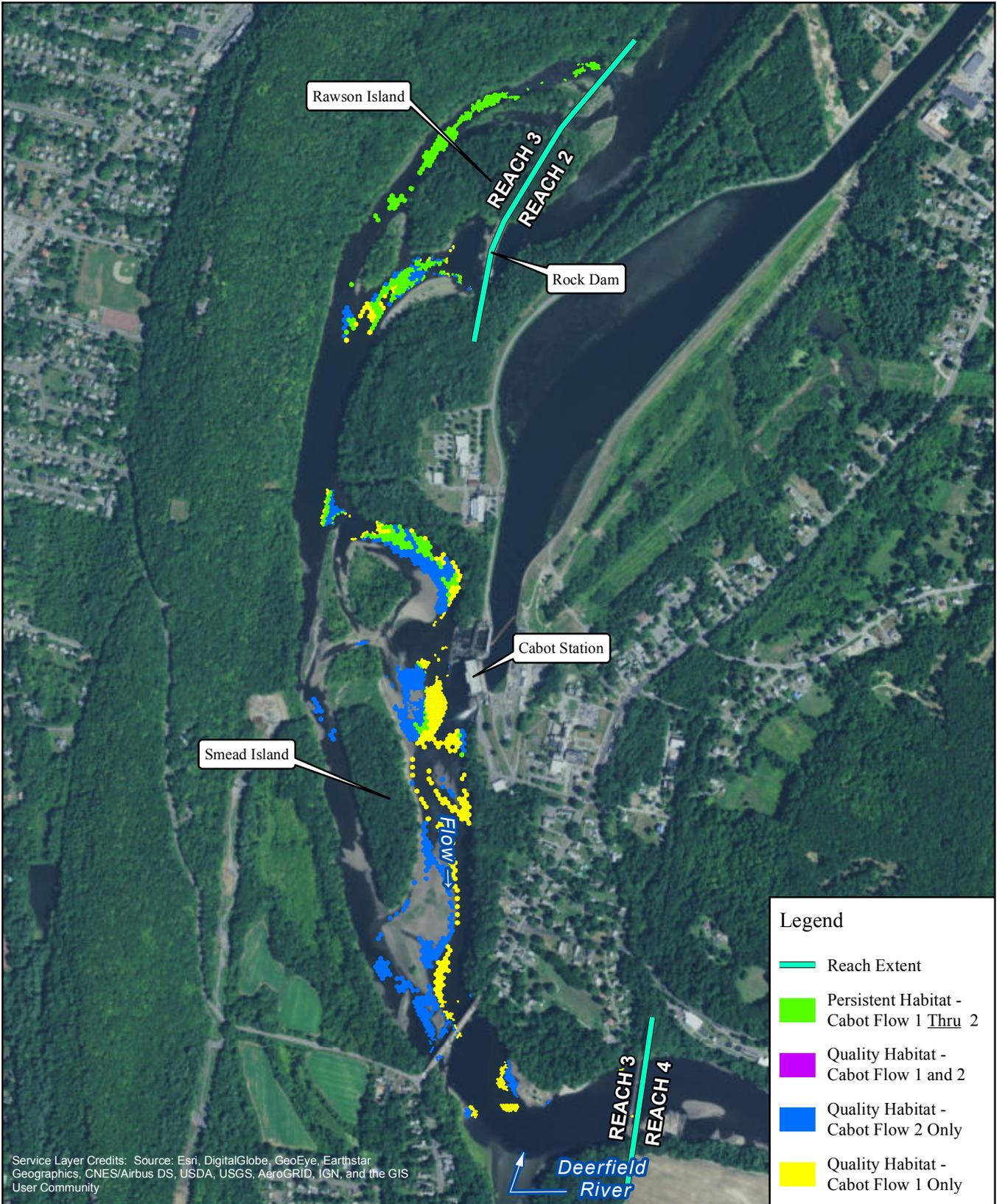


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
 RELICENSING STUDY 3.3.1



Persistent Habitat
 Deep-Fast Guild-
 Bypass Flow: 500 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

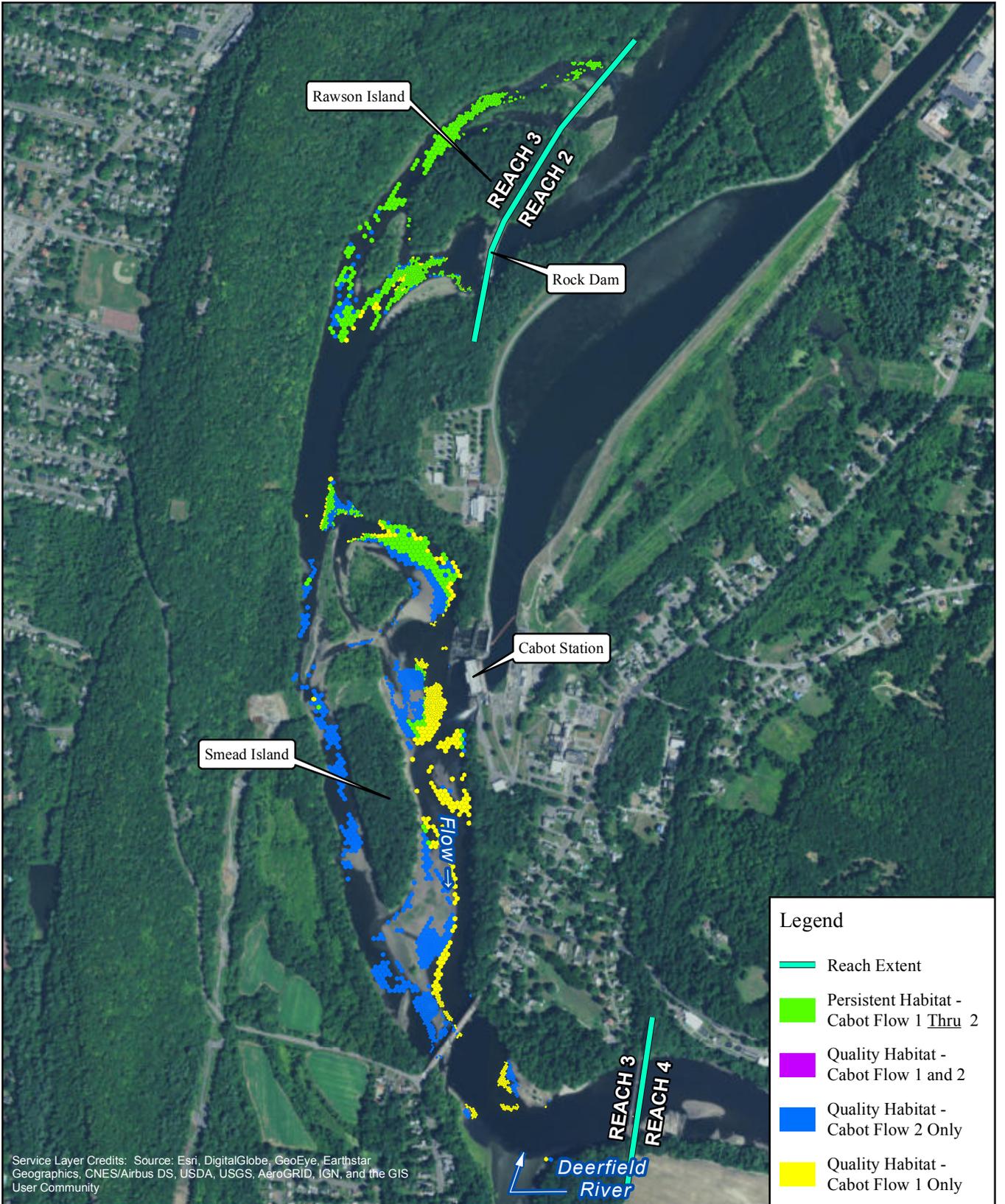
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Deep-Fast Guild-
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet

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Legend

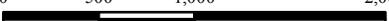
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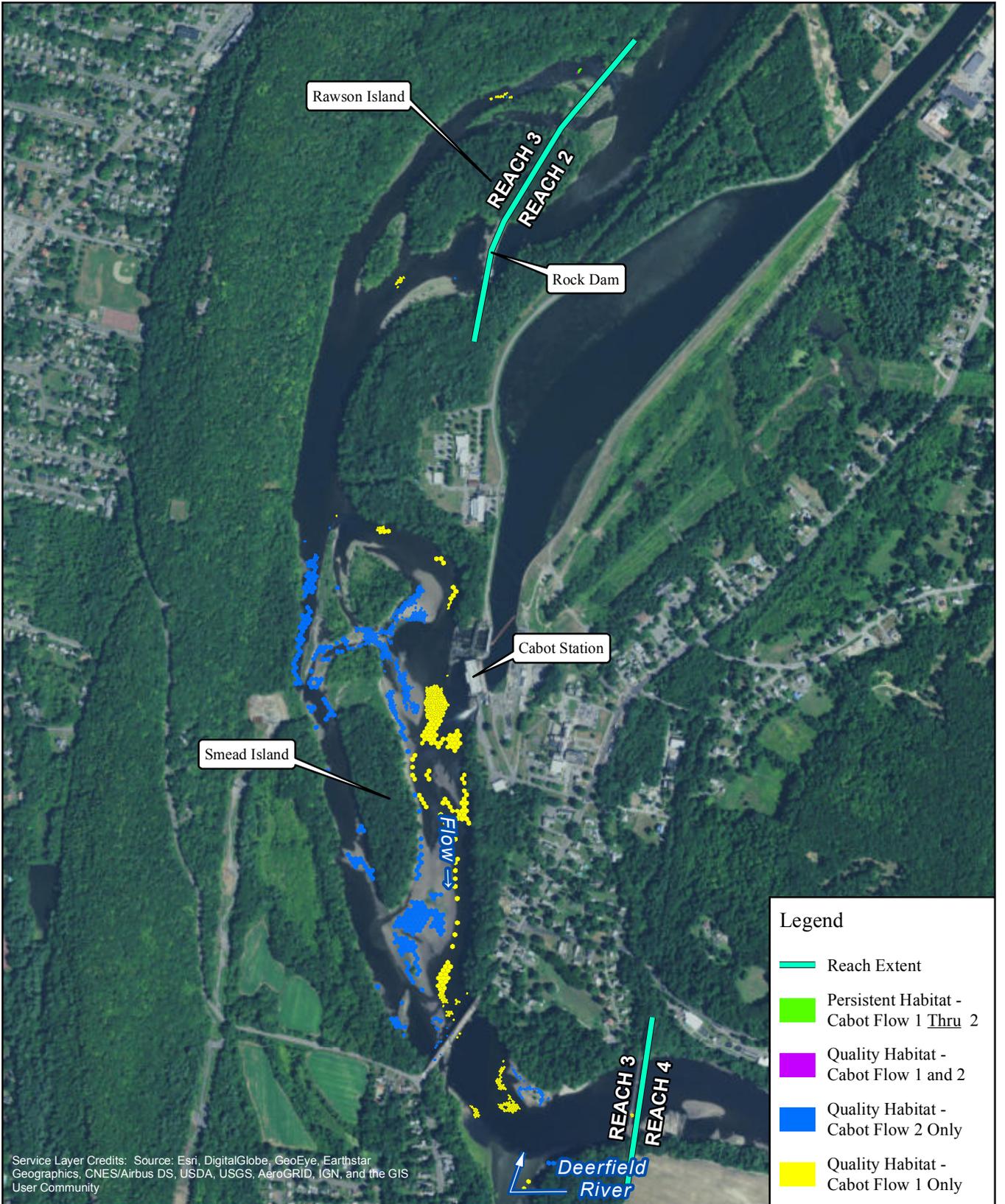
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Persistent Habitat
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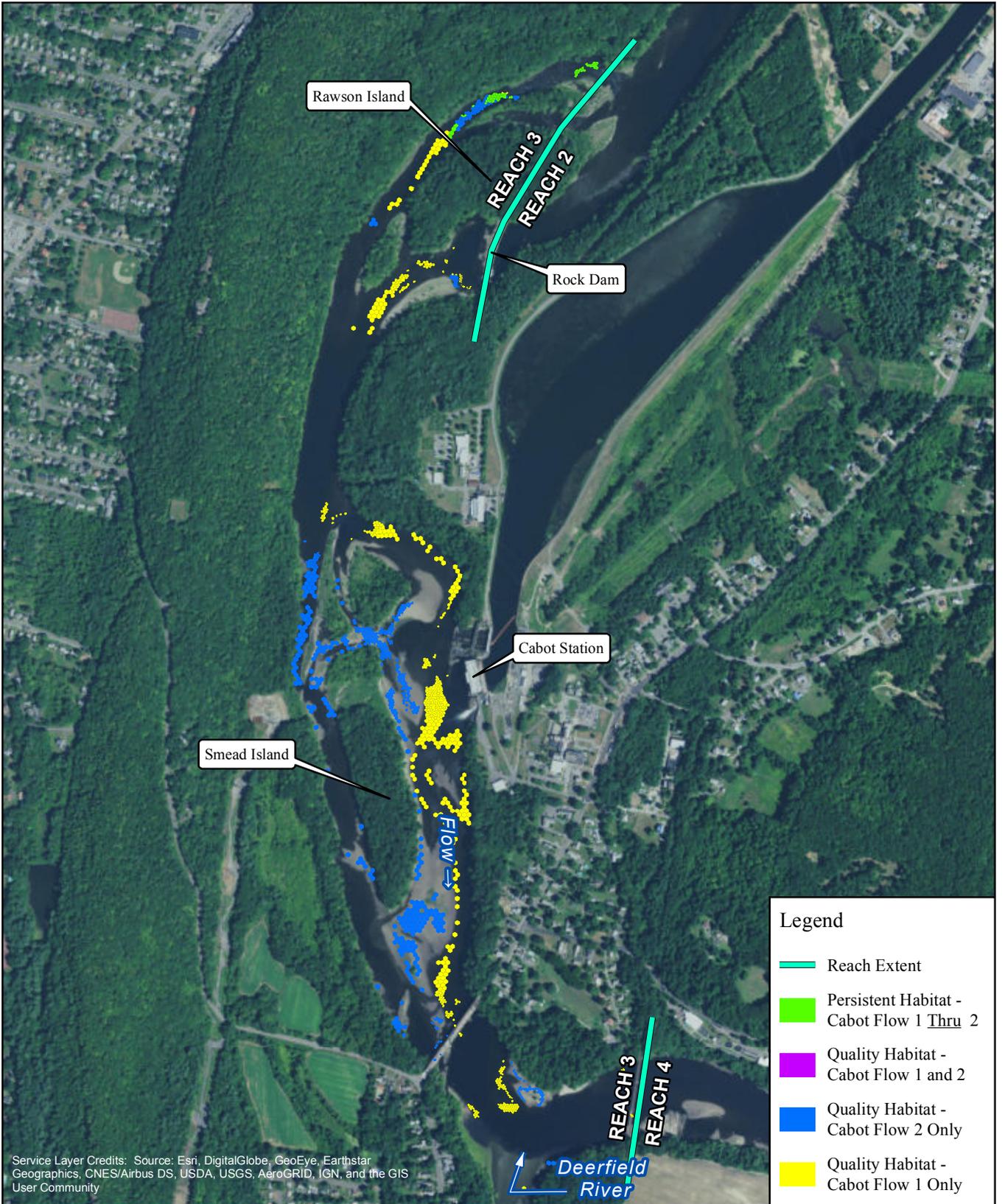
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Persistent Habitat
 Deep-Fast Guild-
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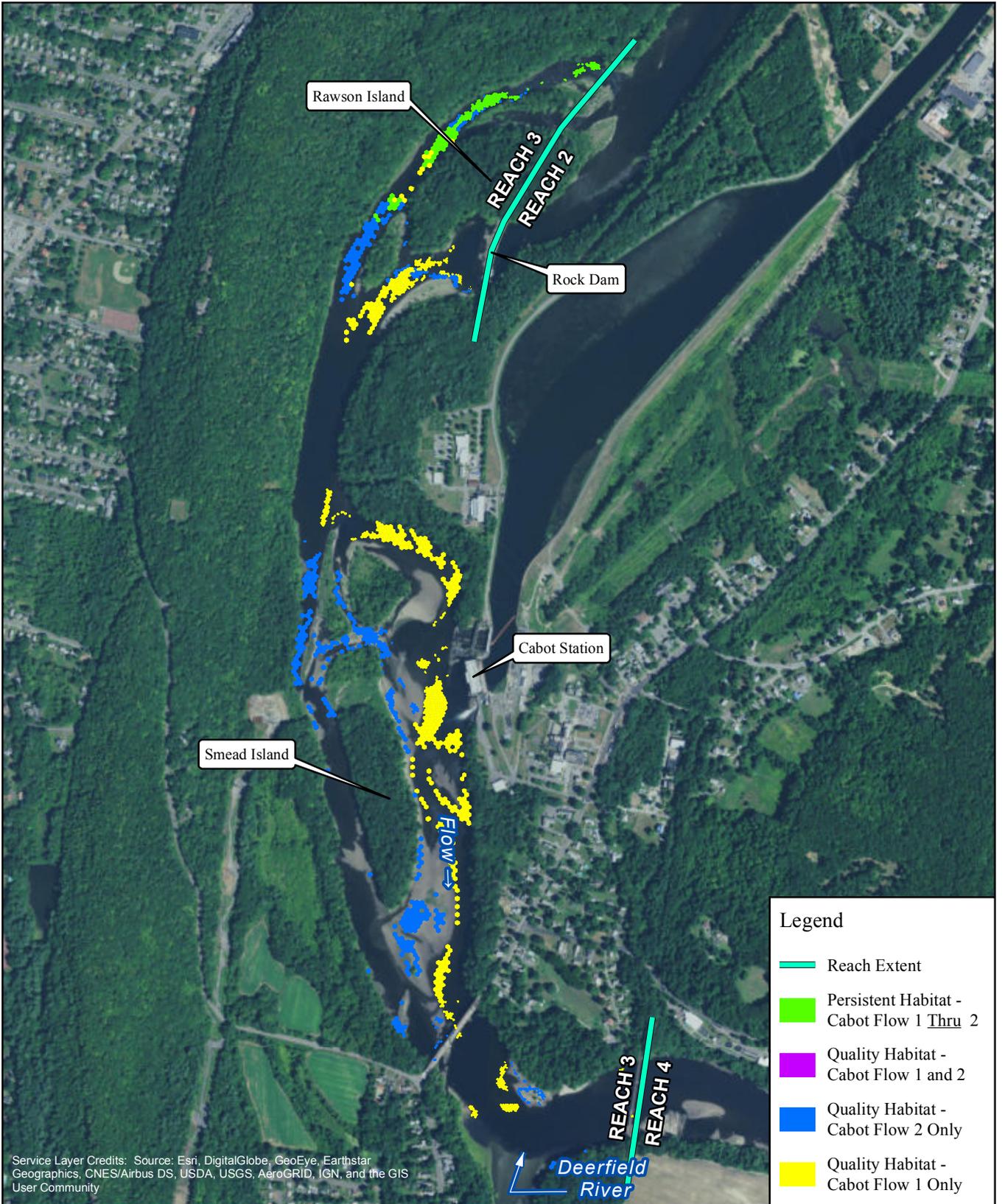


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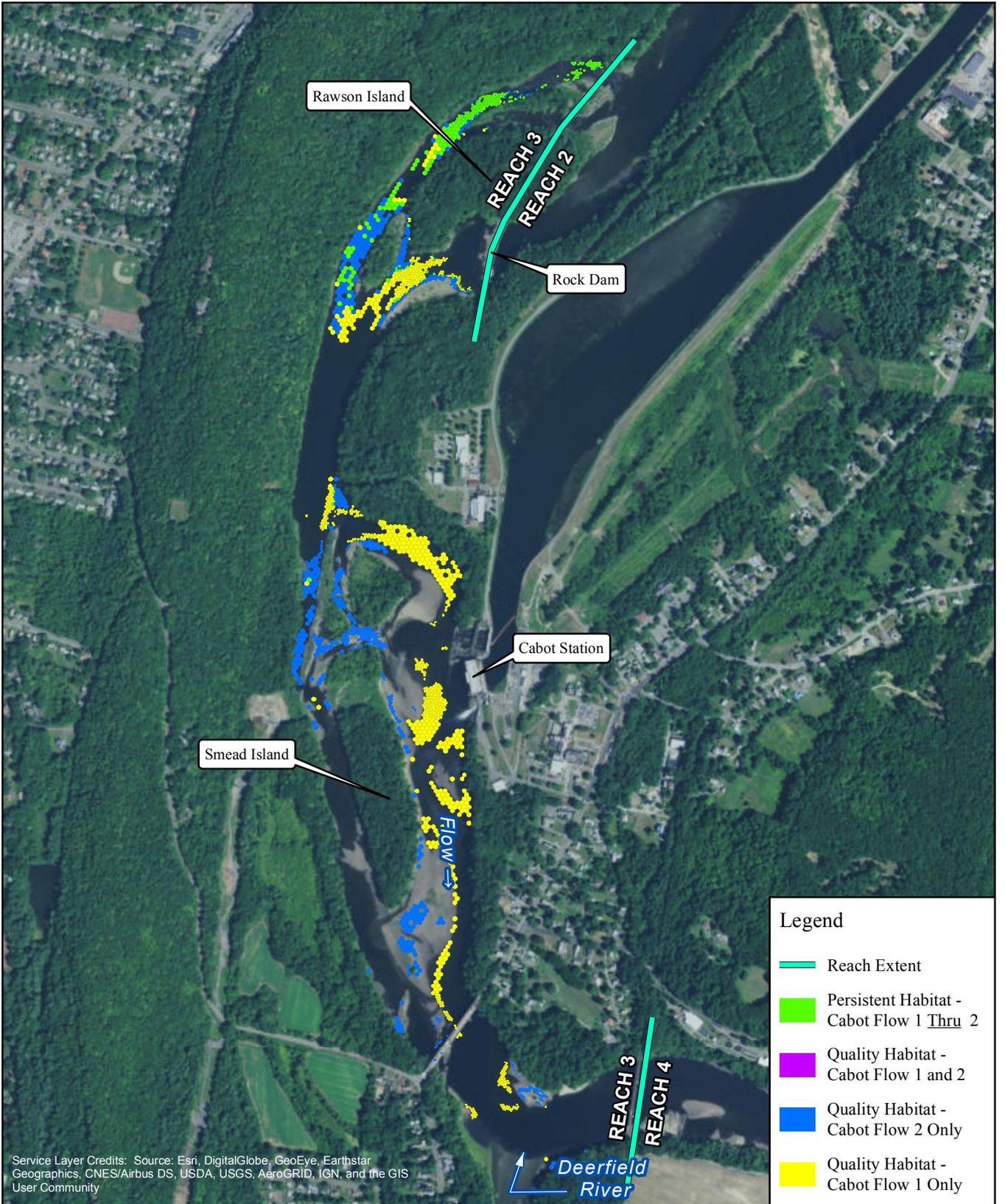


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Persistent Habitat
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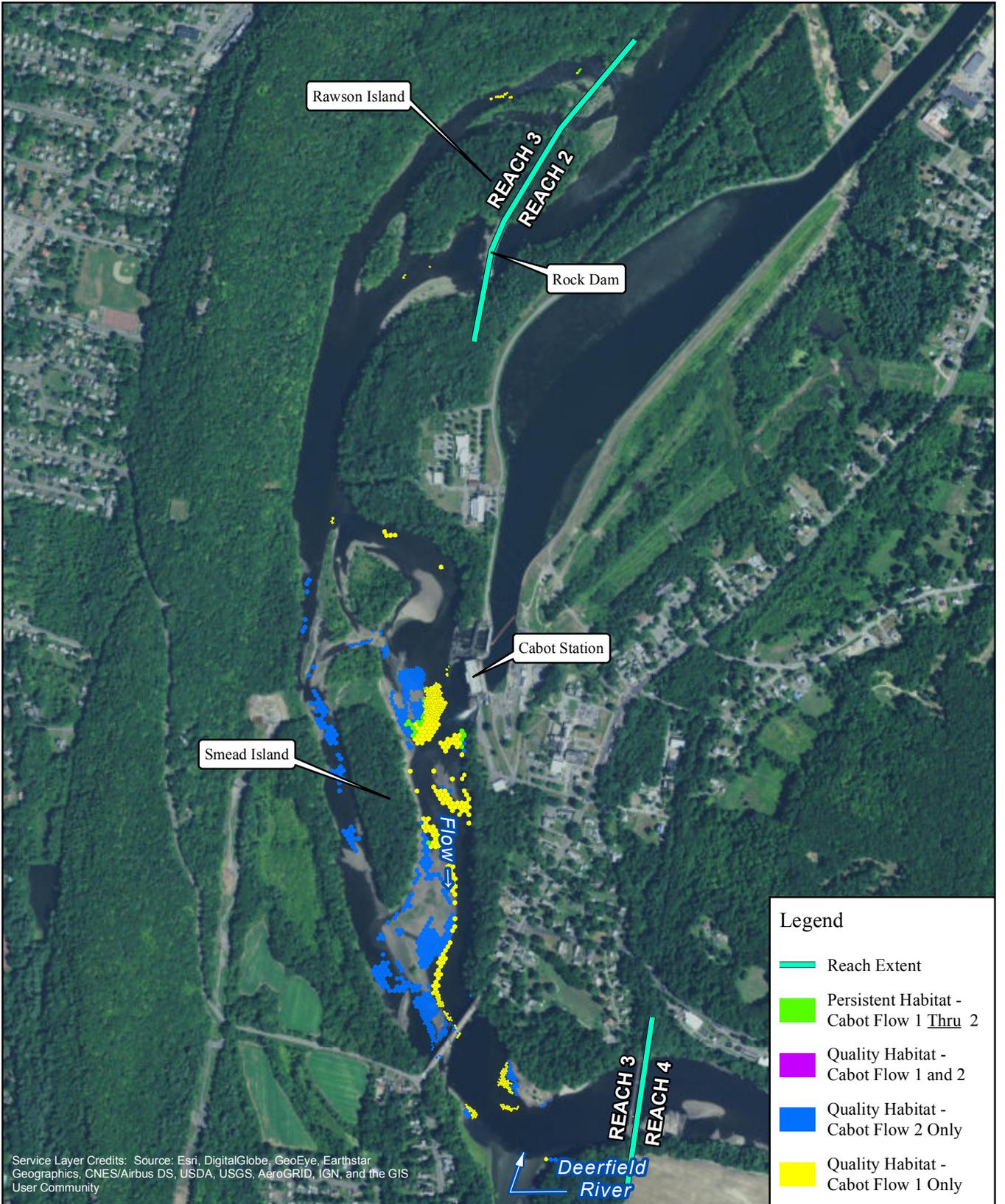
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Persistent Habitat
Deep-Fast Guild-

Bypass Flow:	2000 cfs
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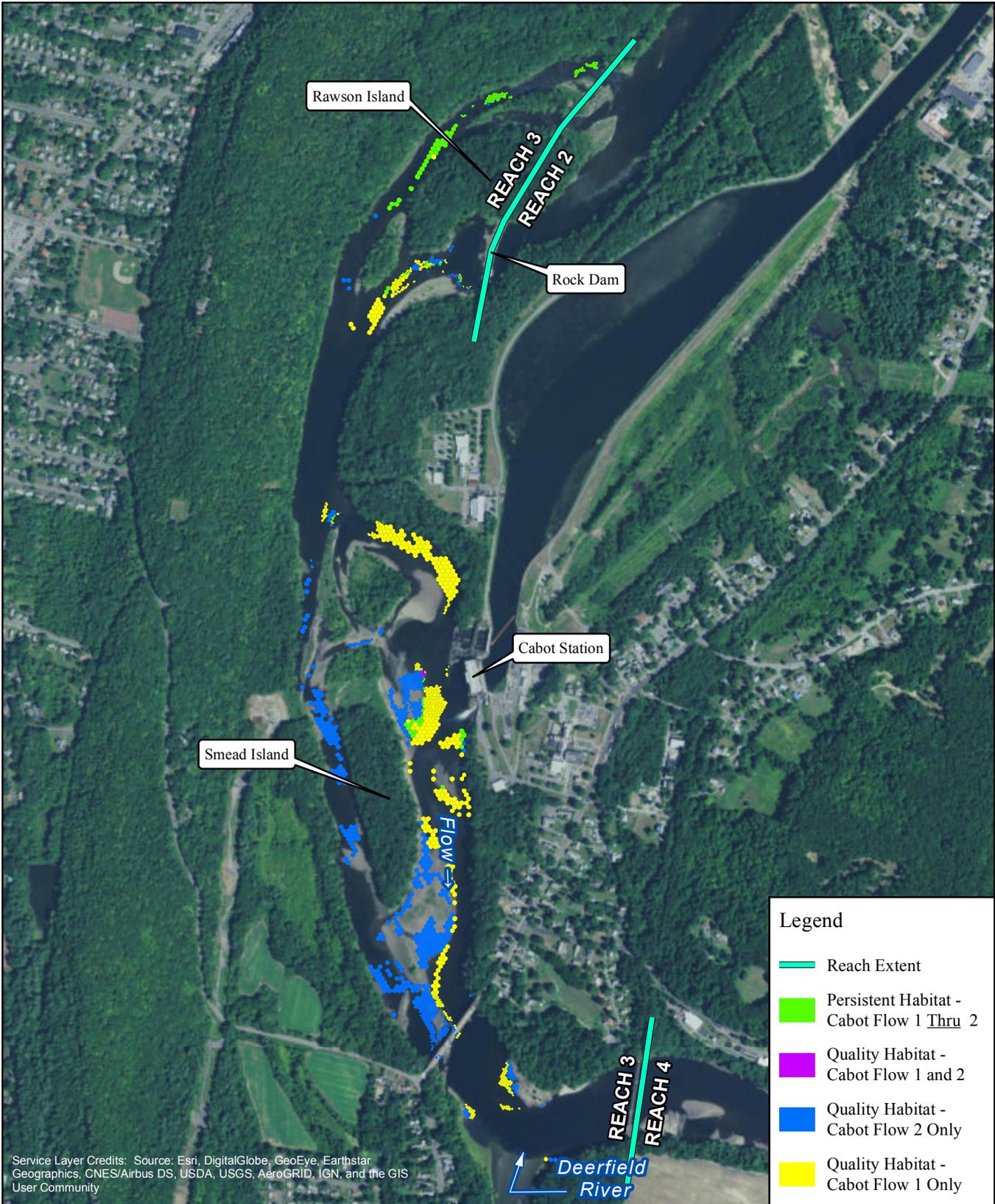


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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1



Persistent Habitat
 Deep-Fast Guild-
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 9000 cfs

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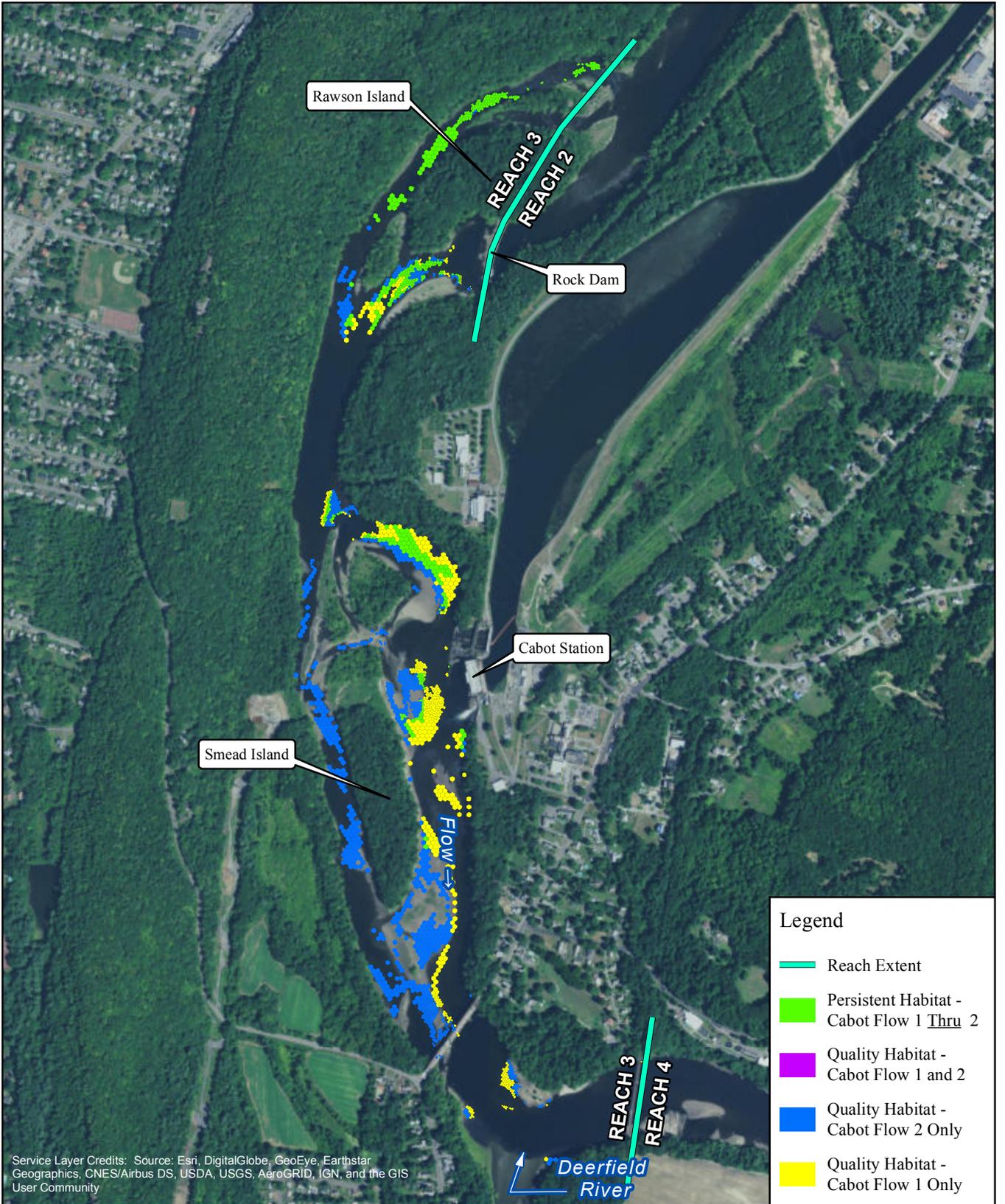


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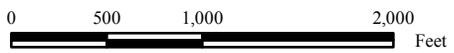
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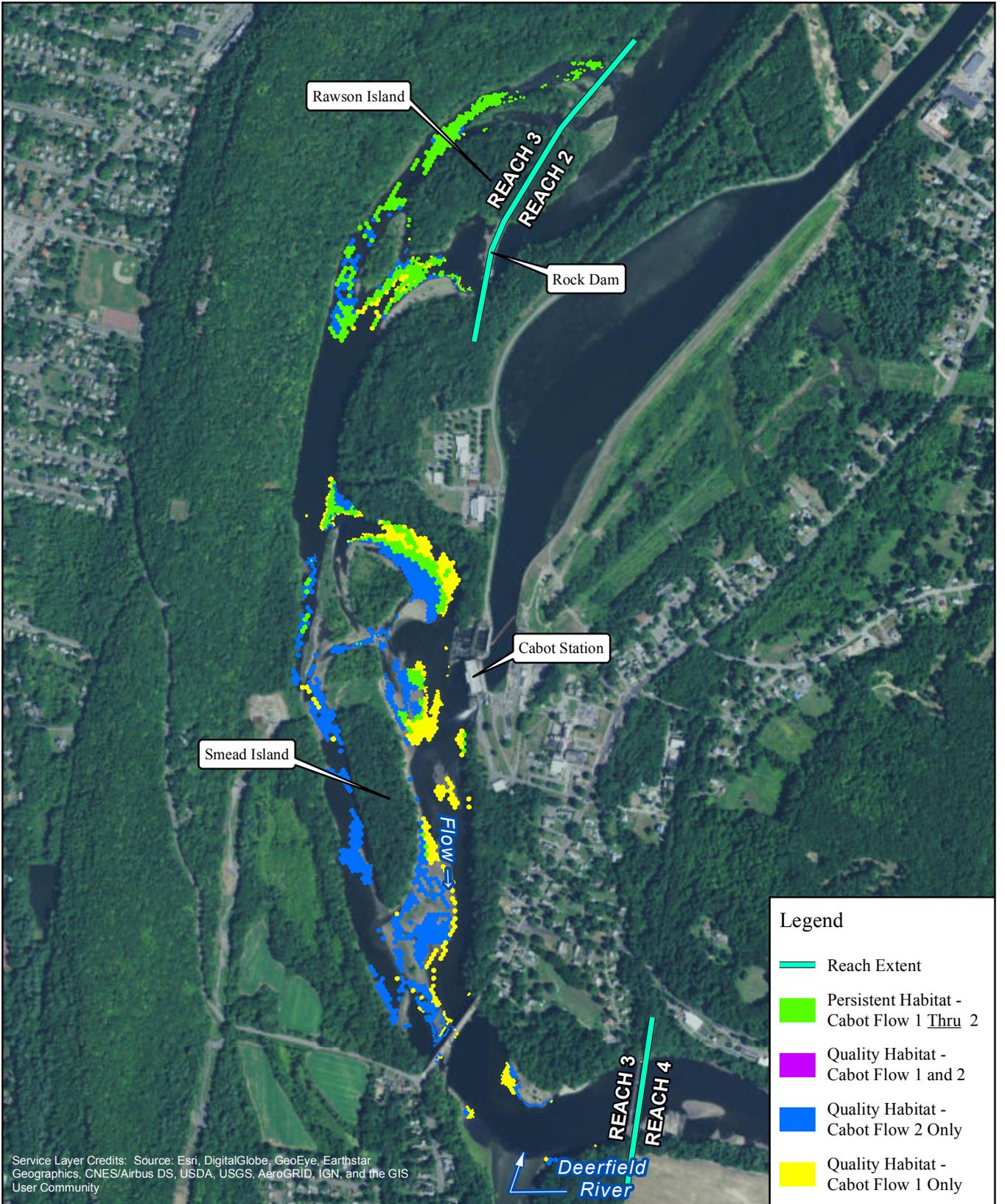


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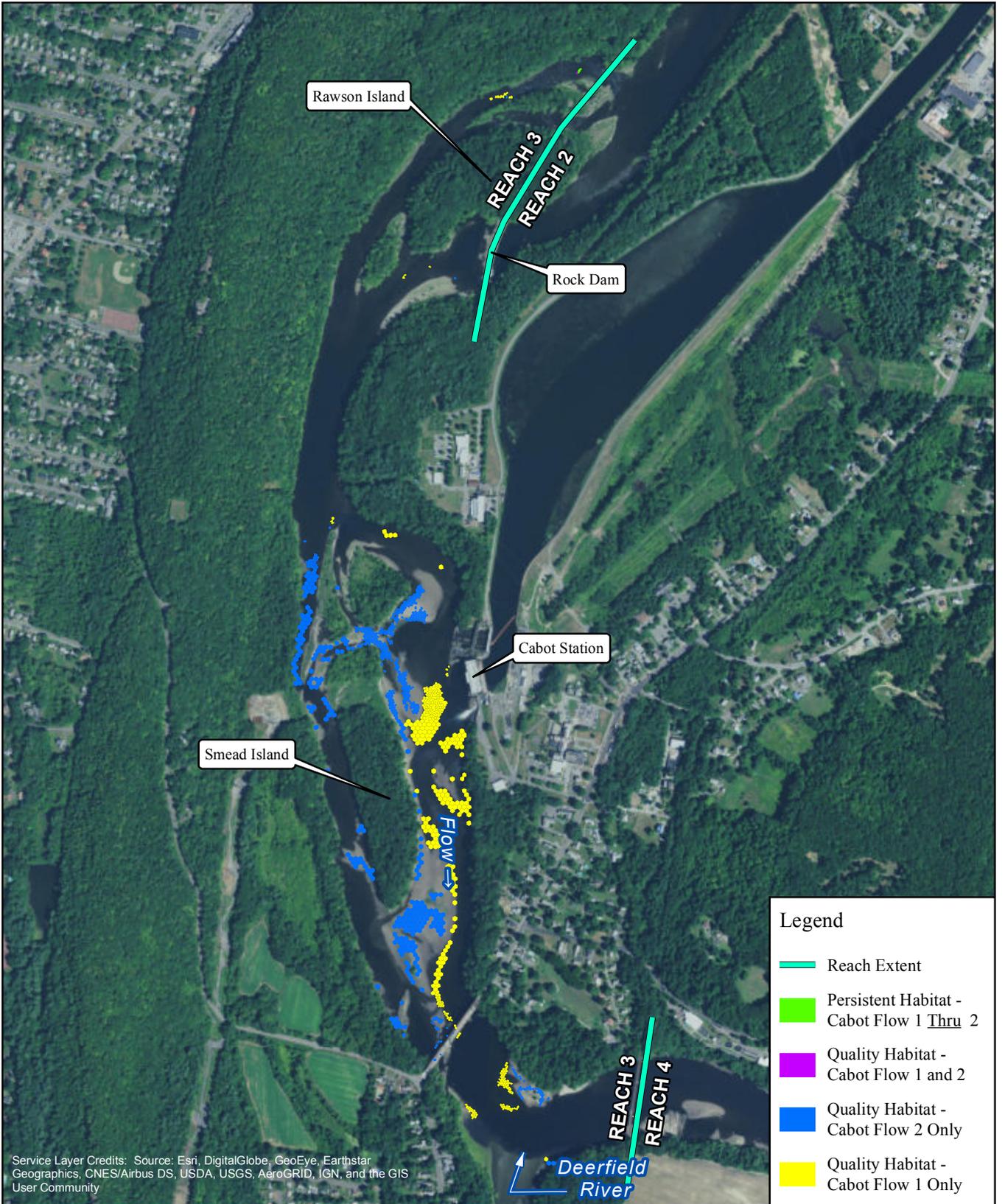


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Persistent Habitat
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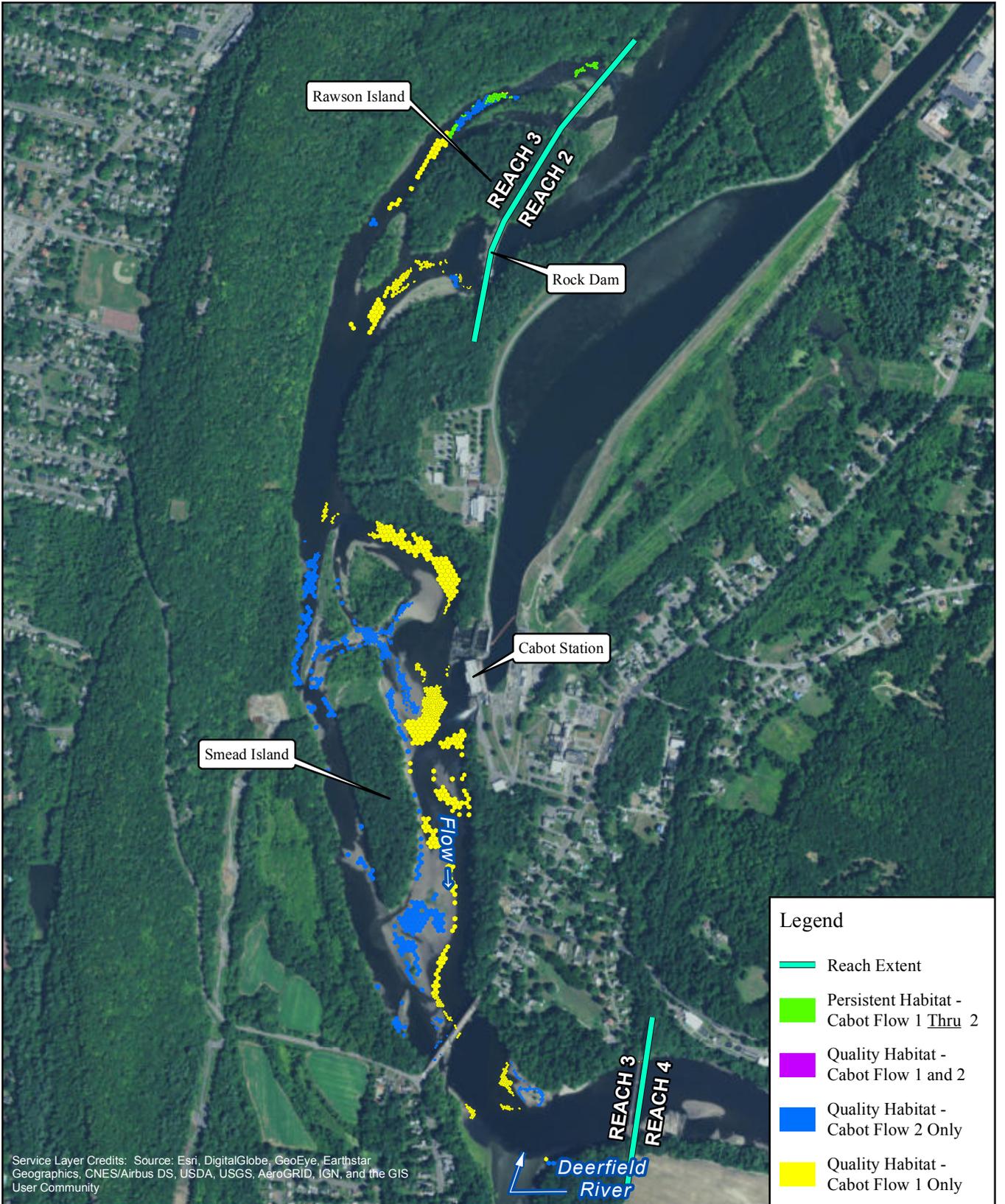
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0 500 1,000 2,000 Feet

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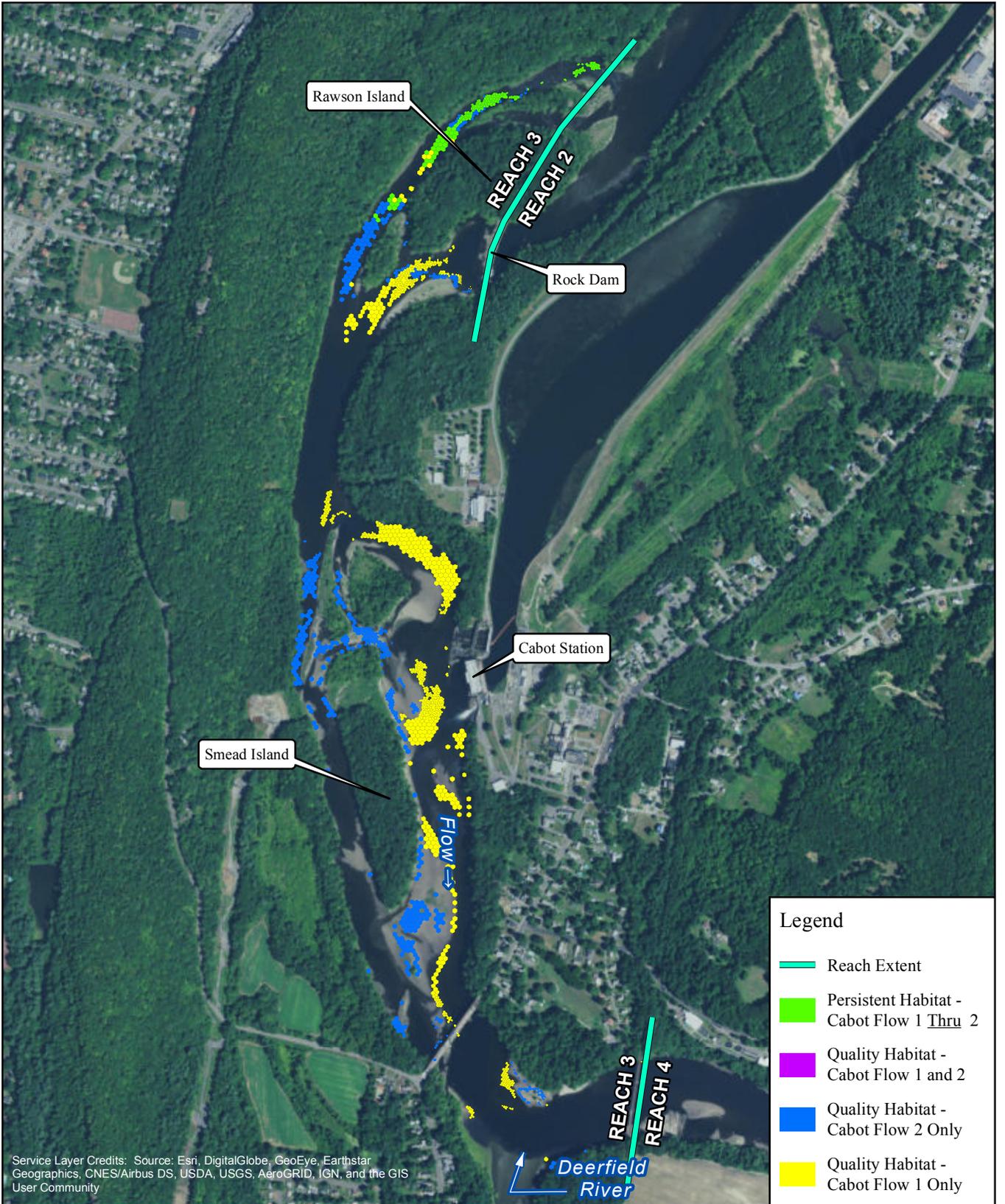
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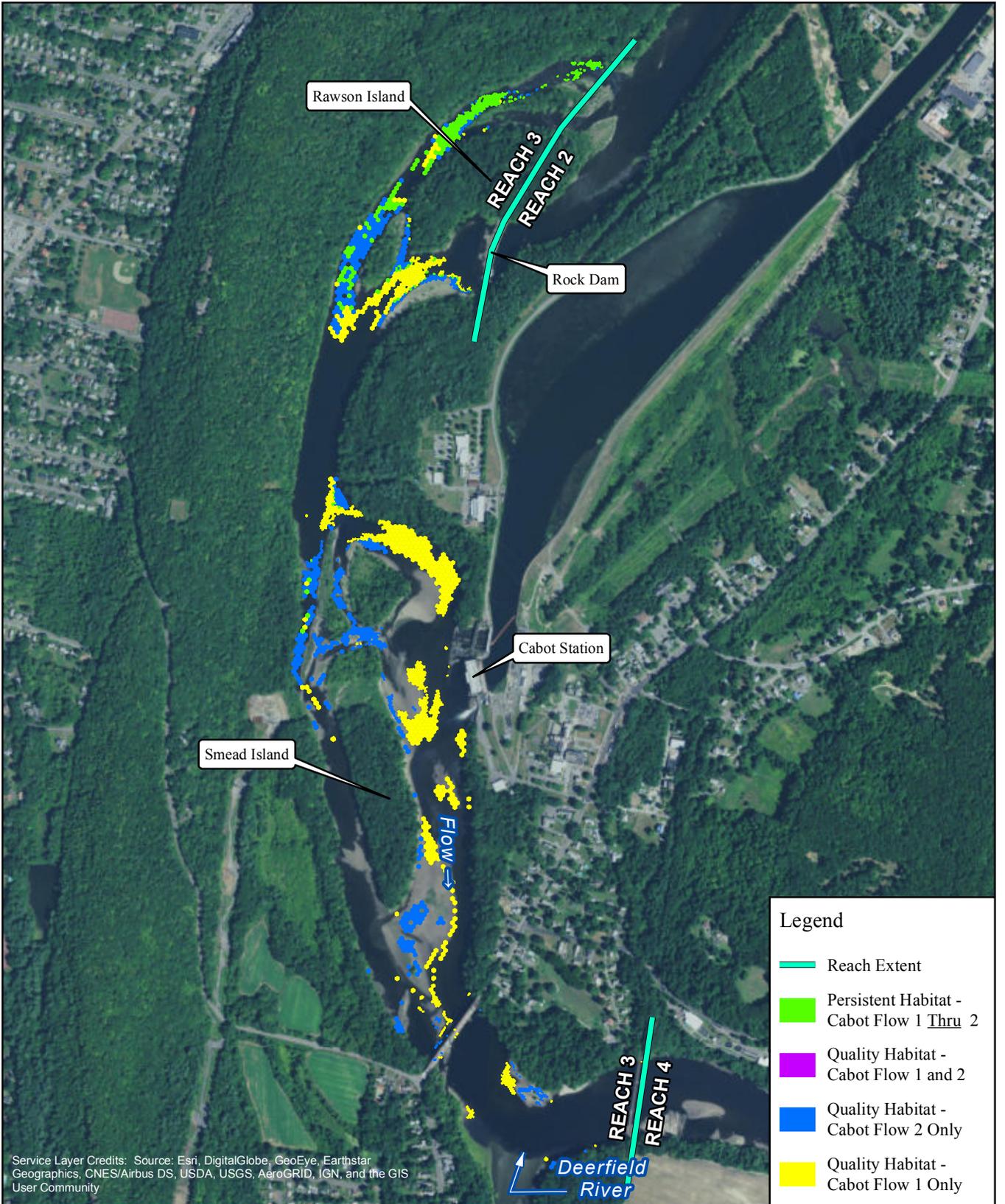
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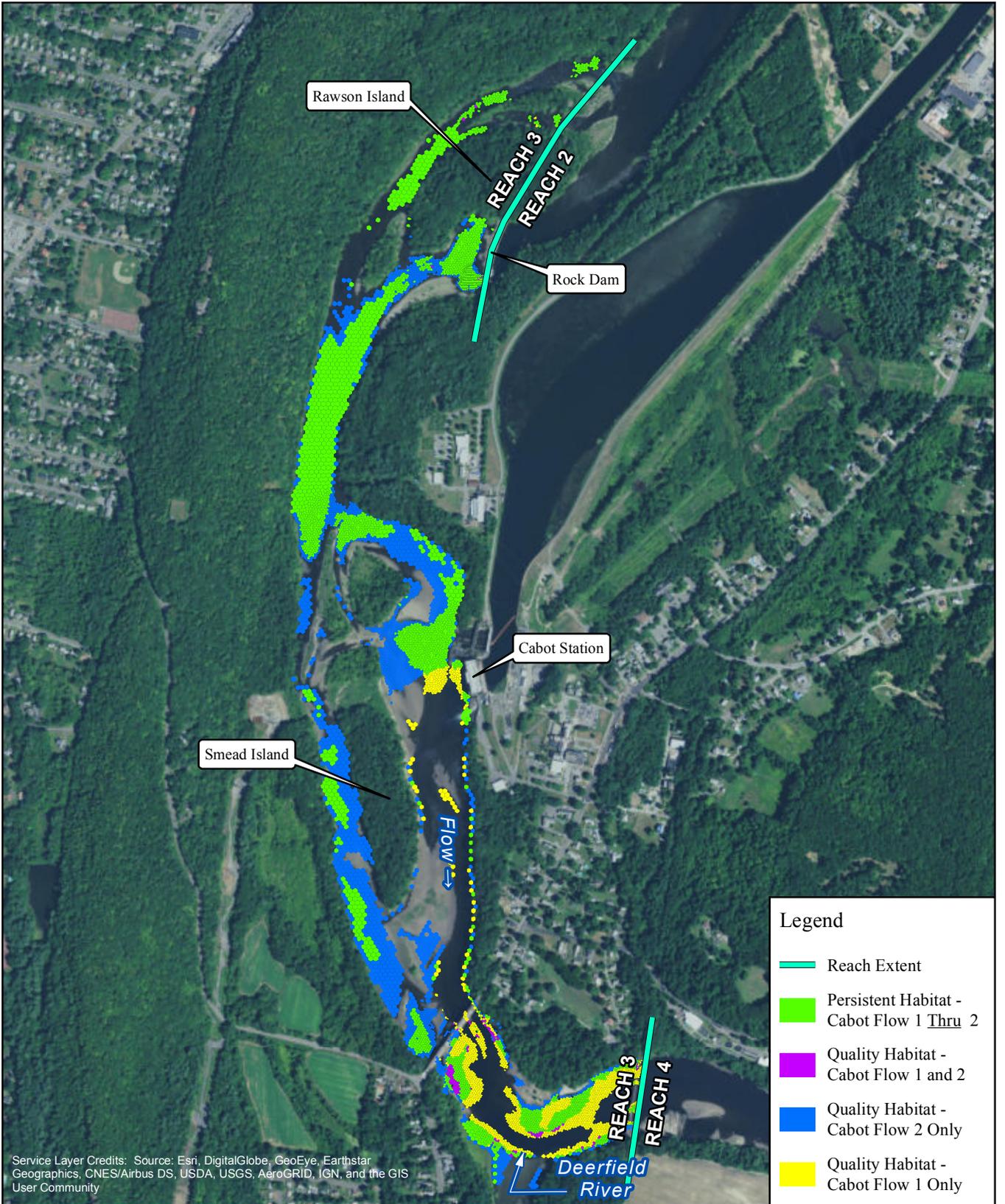


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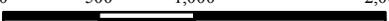
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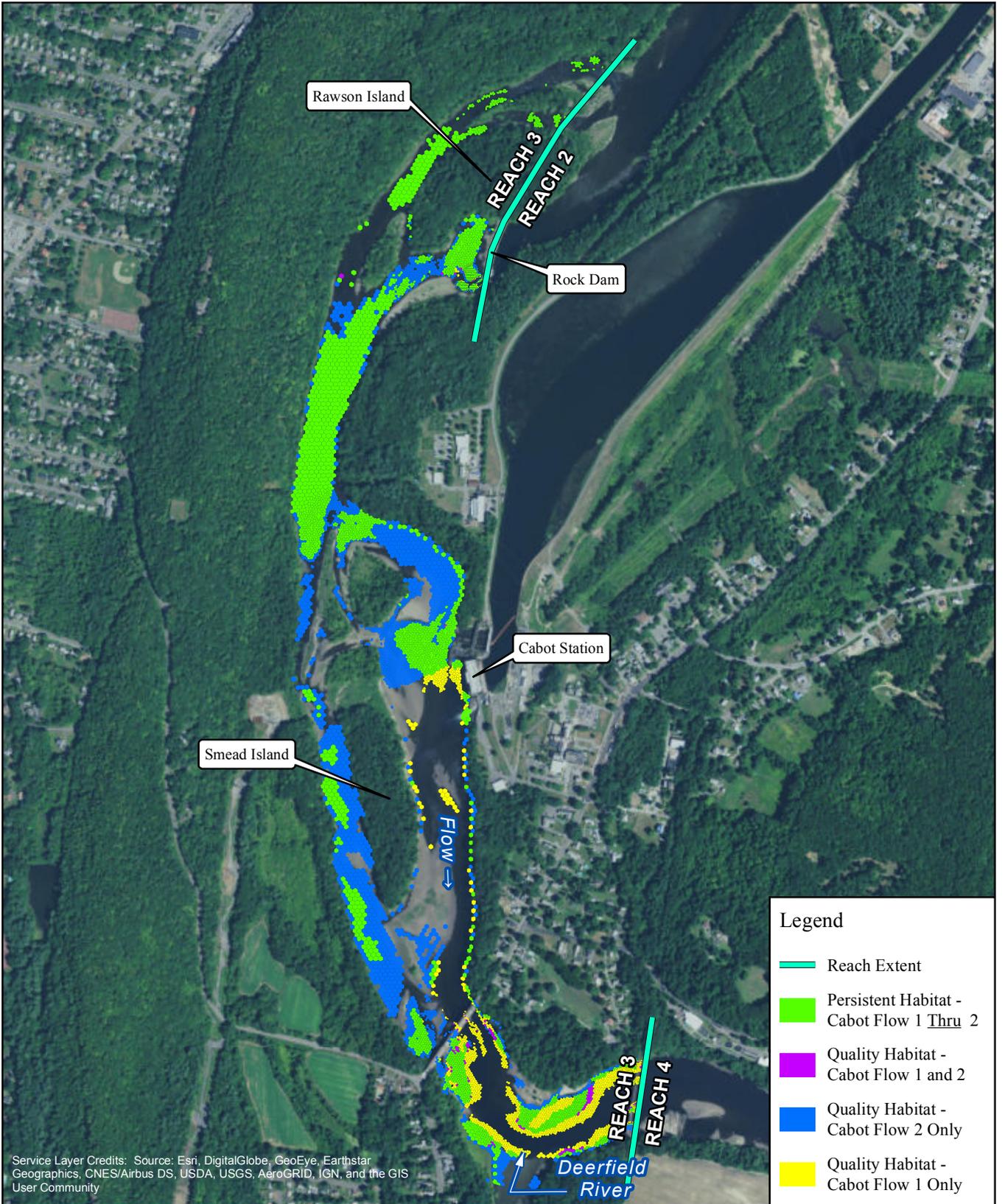
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Deep-Slow Guild-
 Bypass Flow: 200 cfs
 Cabot Flow 1: 2500 cfs
 Cabot Flow 2: 7000 cfs

0 500 1,000 2,000 Feet



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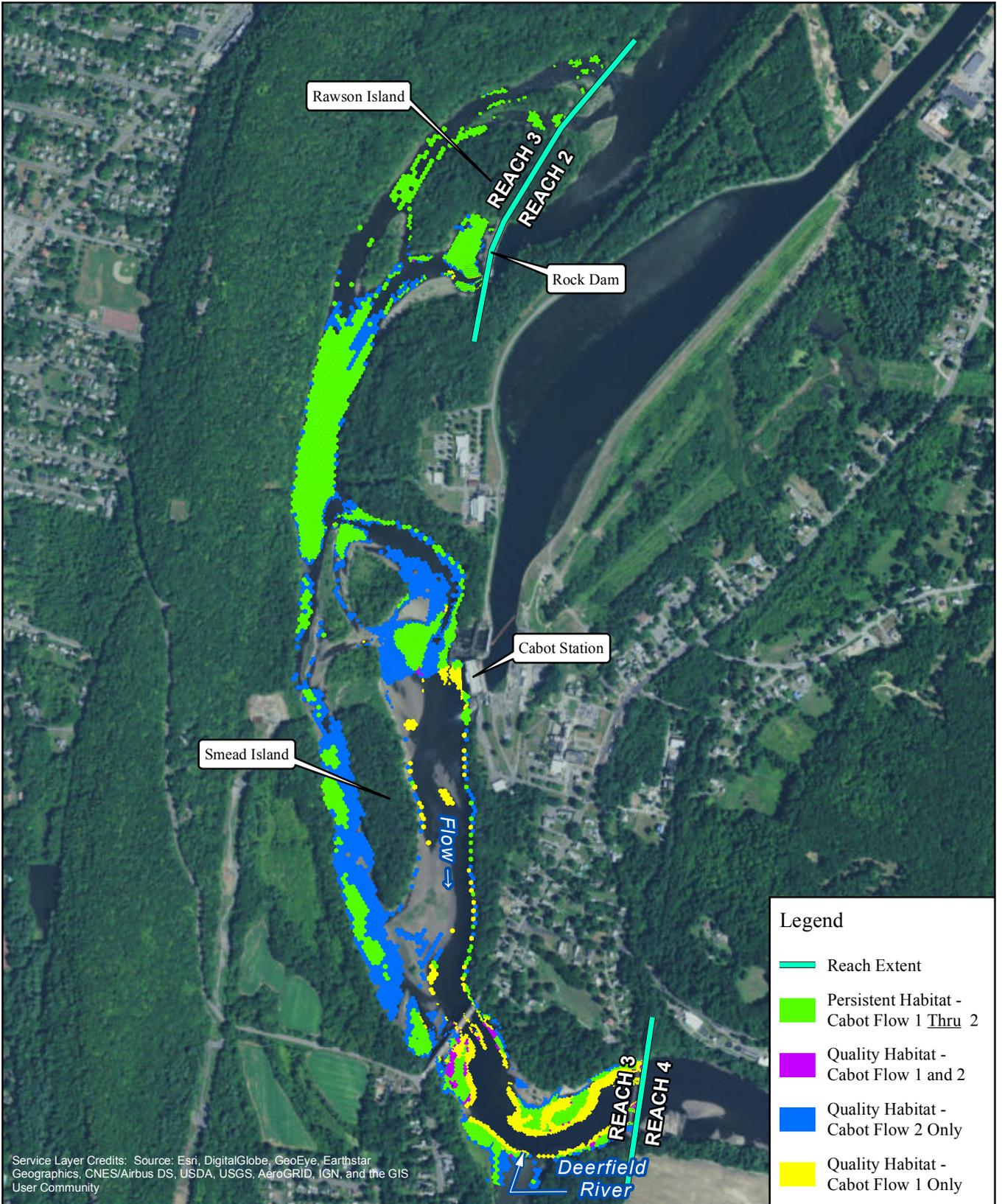
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RELICENSING STUDY 3.3.1



Persistent Habitat
 Deep-Slow Guild-
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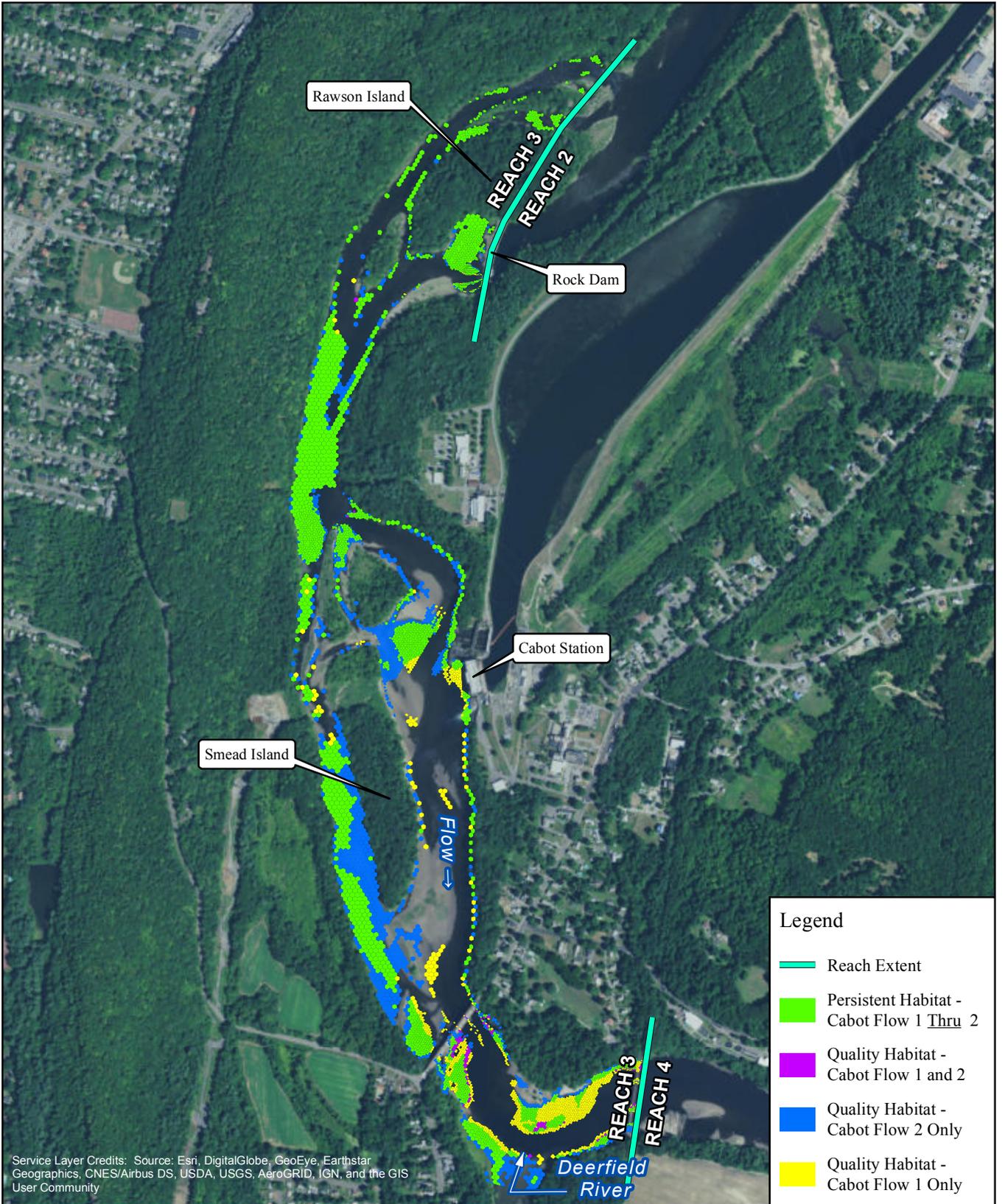
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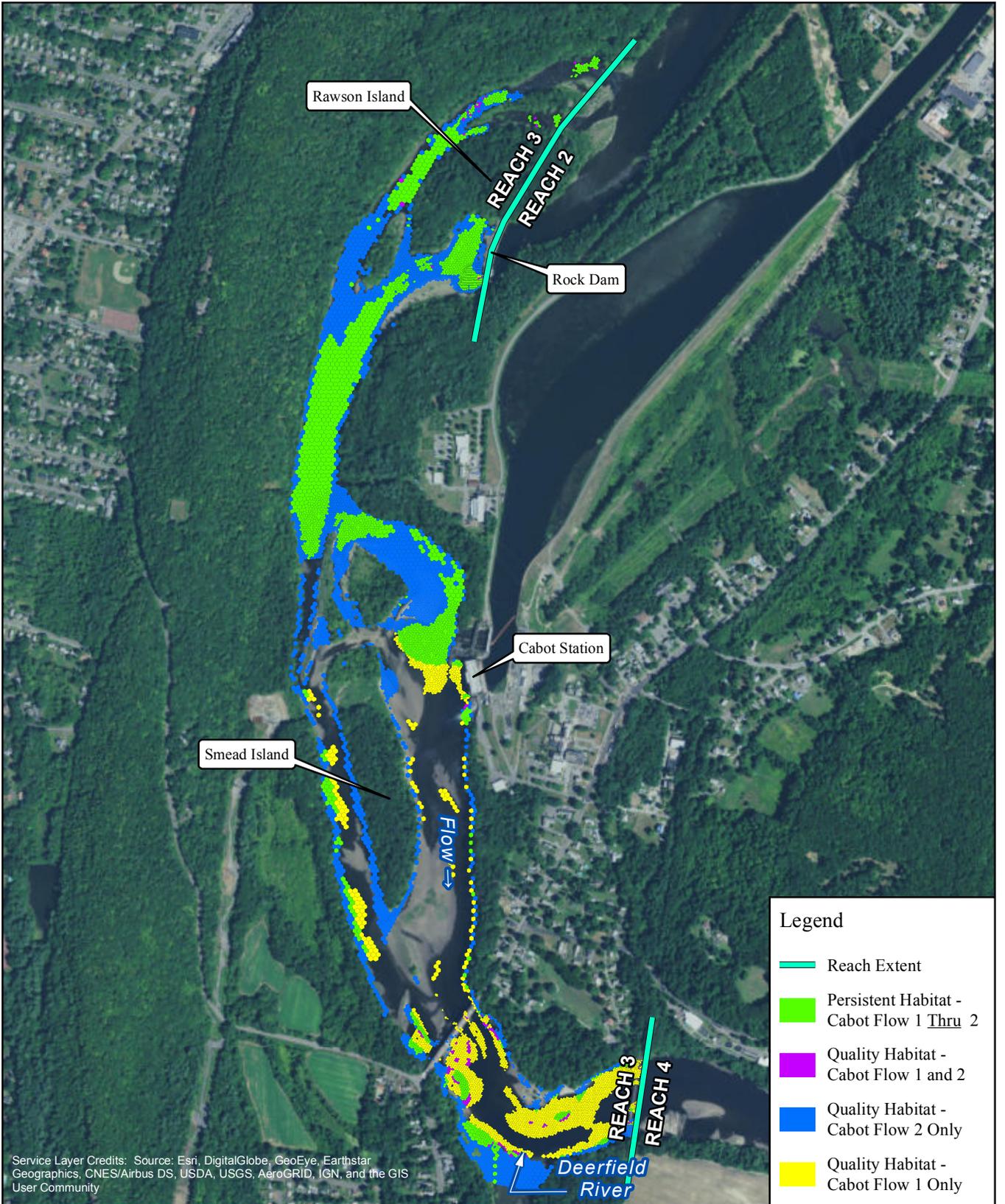
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Persistent Habitat
 Deep-Slow_Guild-
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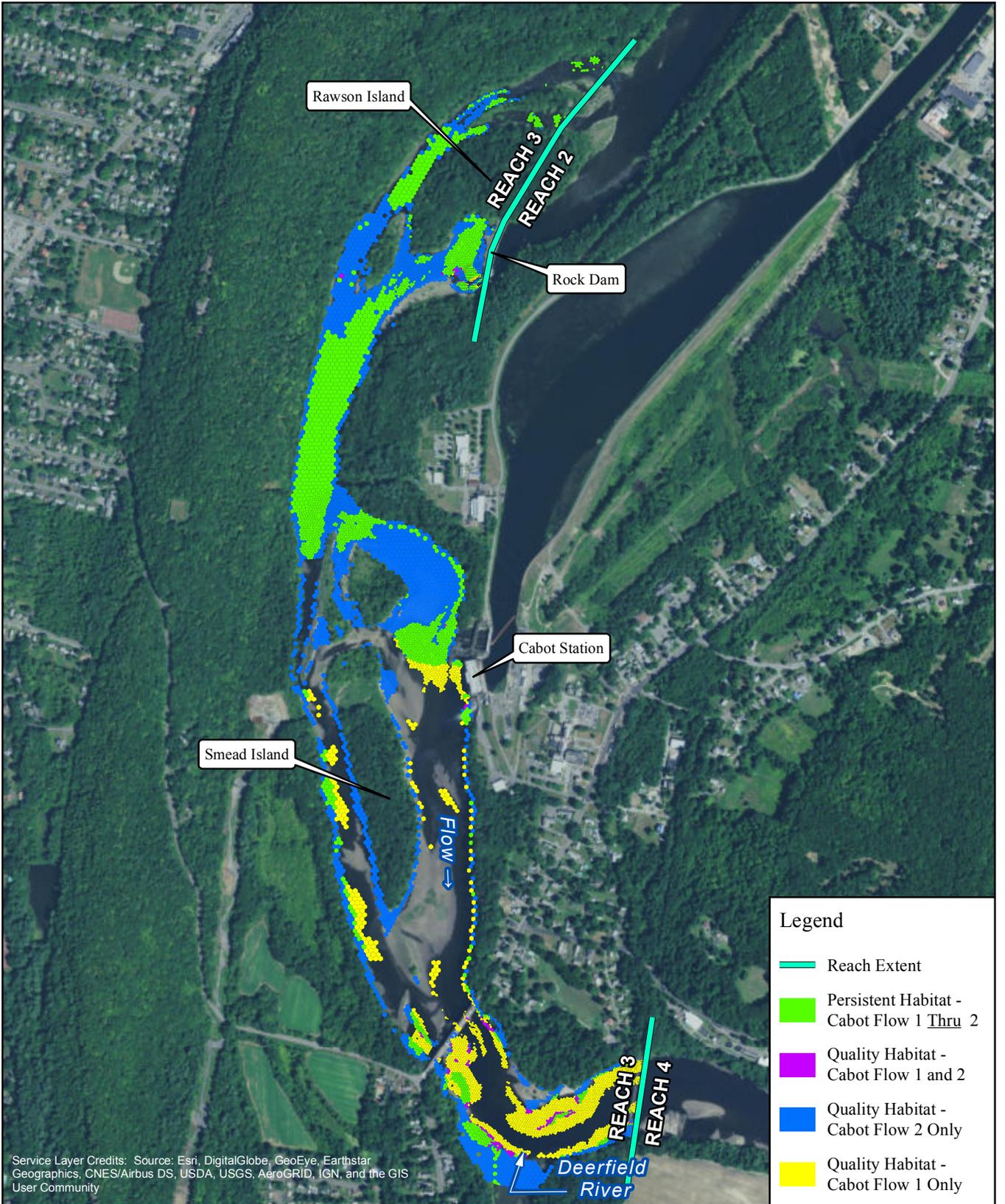
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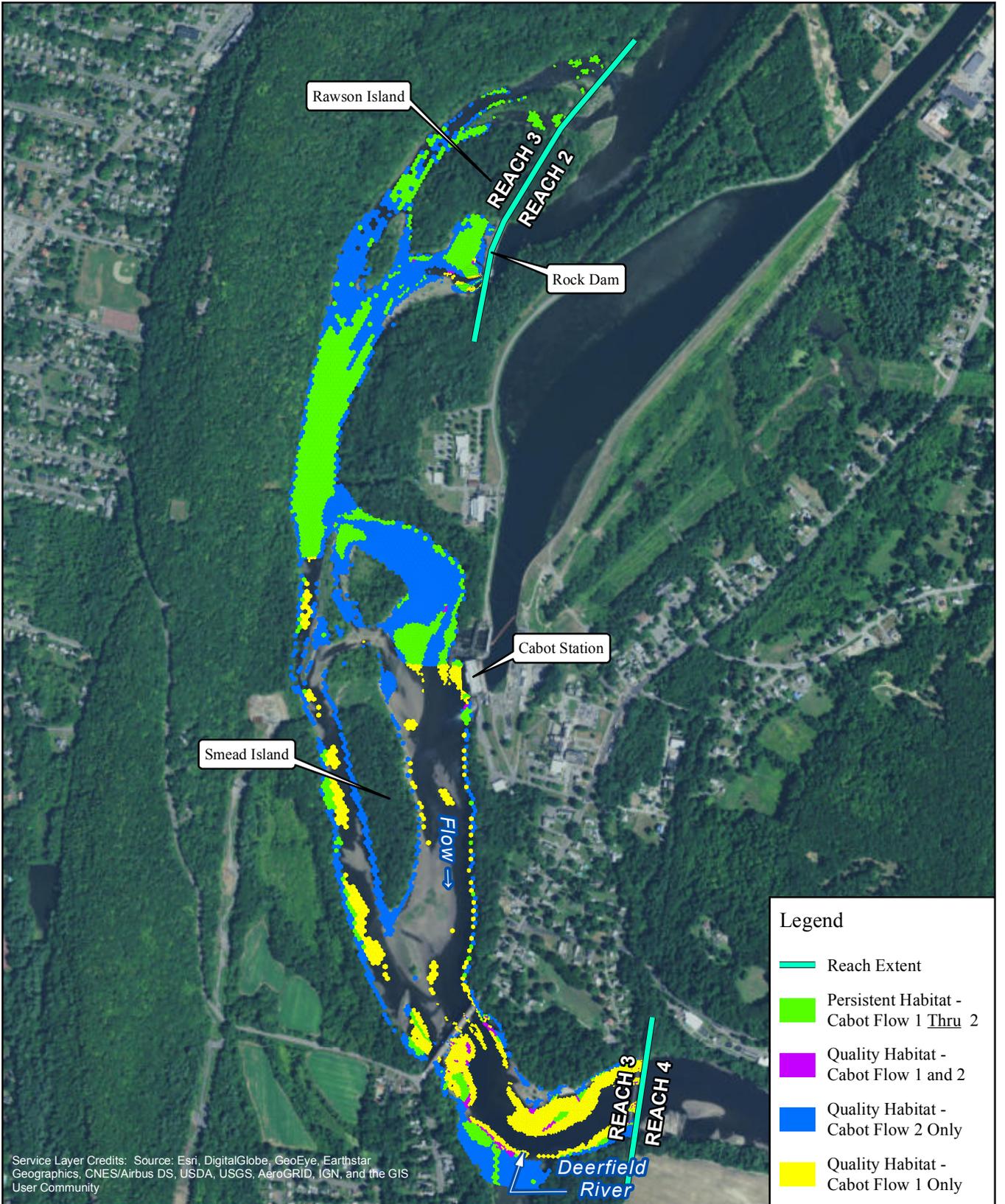
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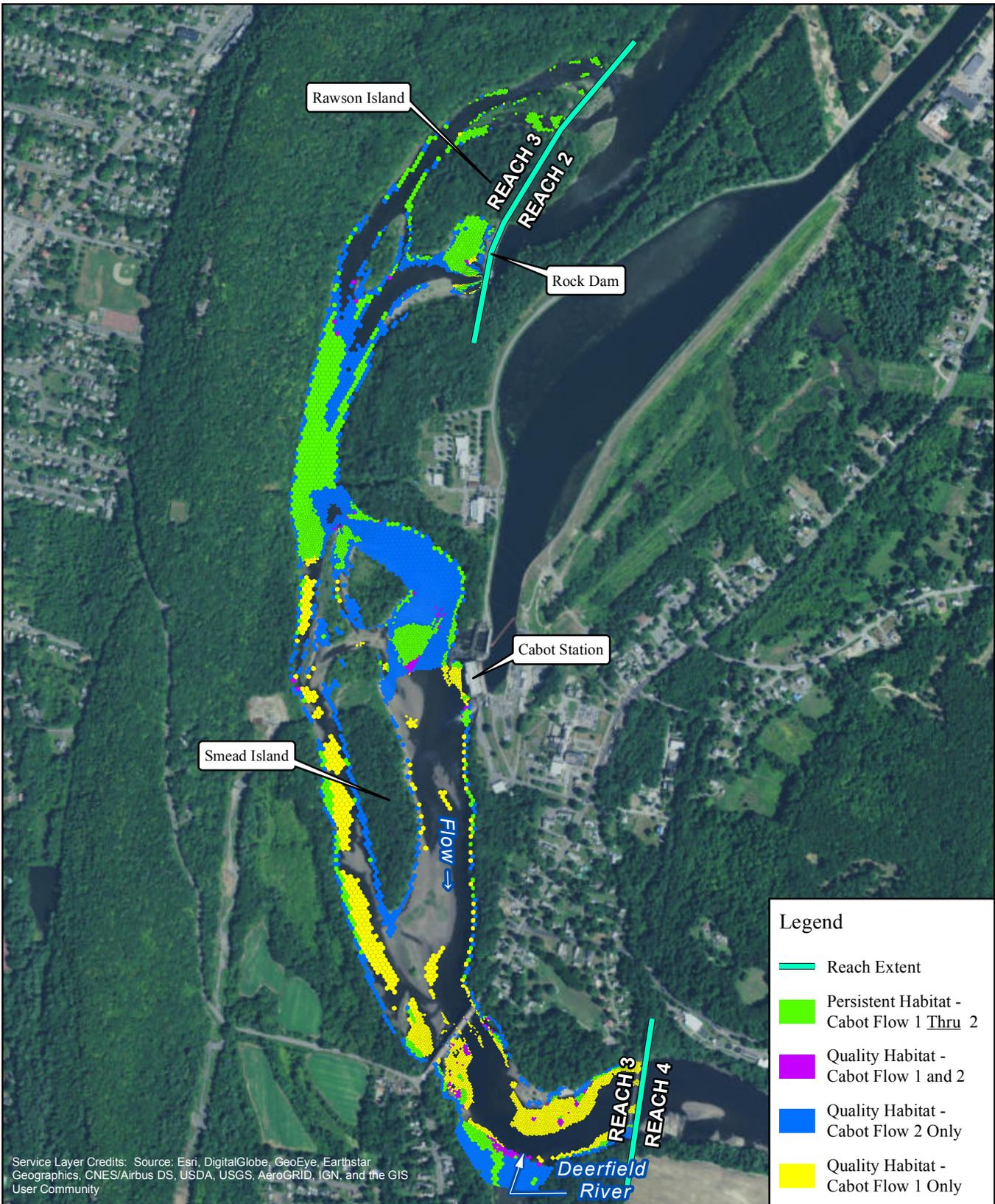


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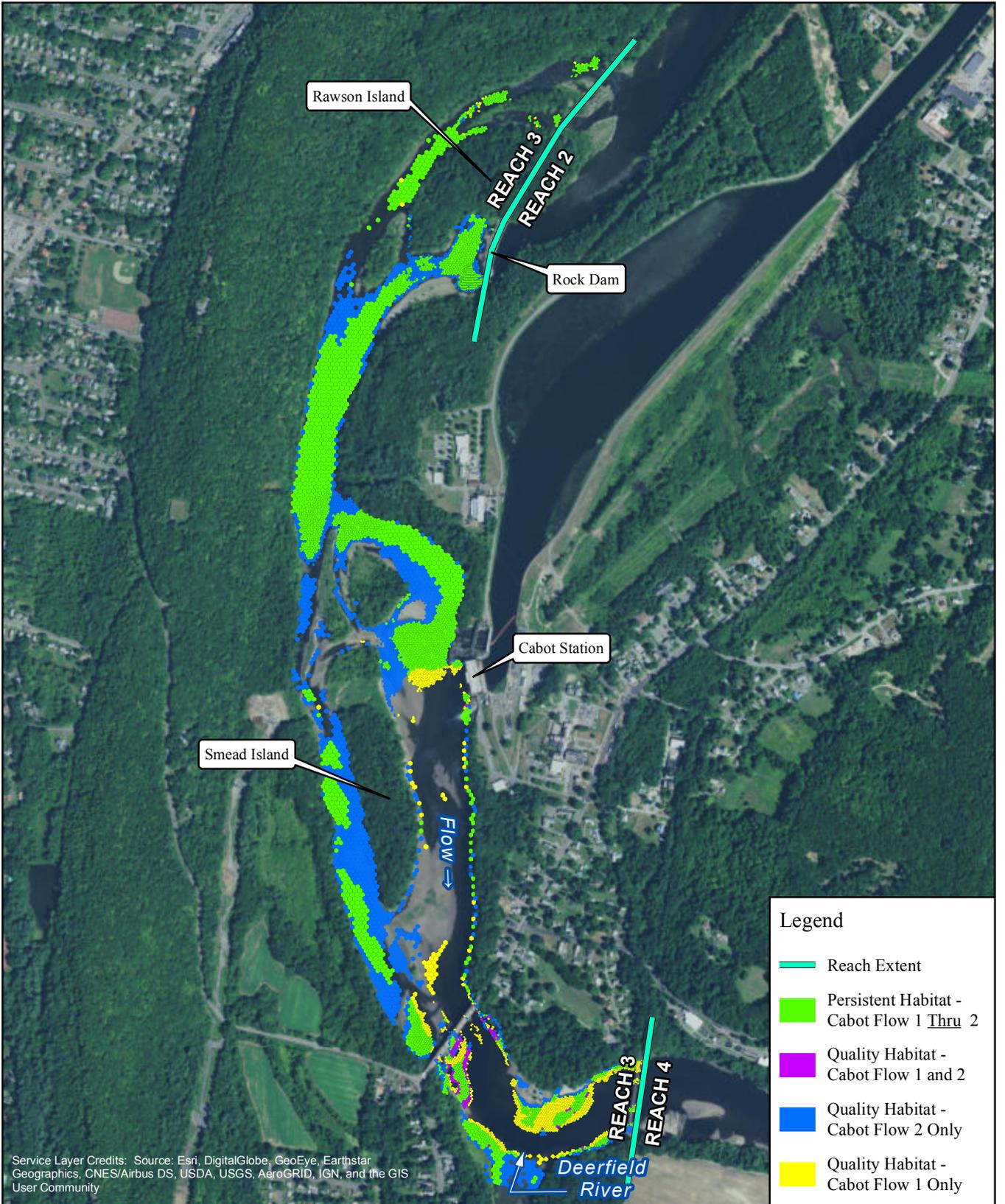
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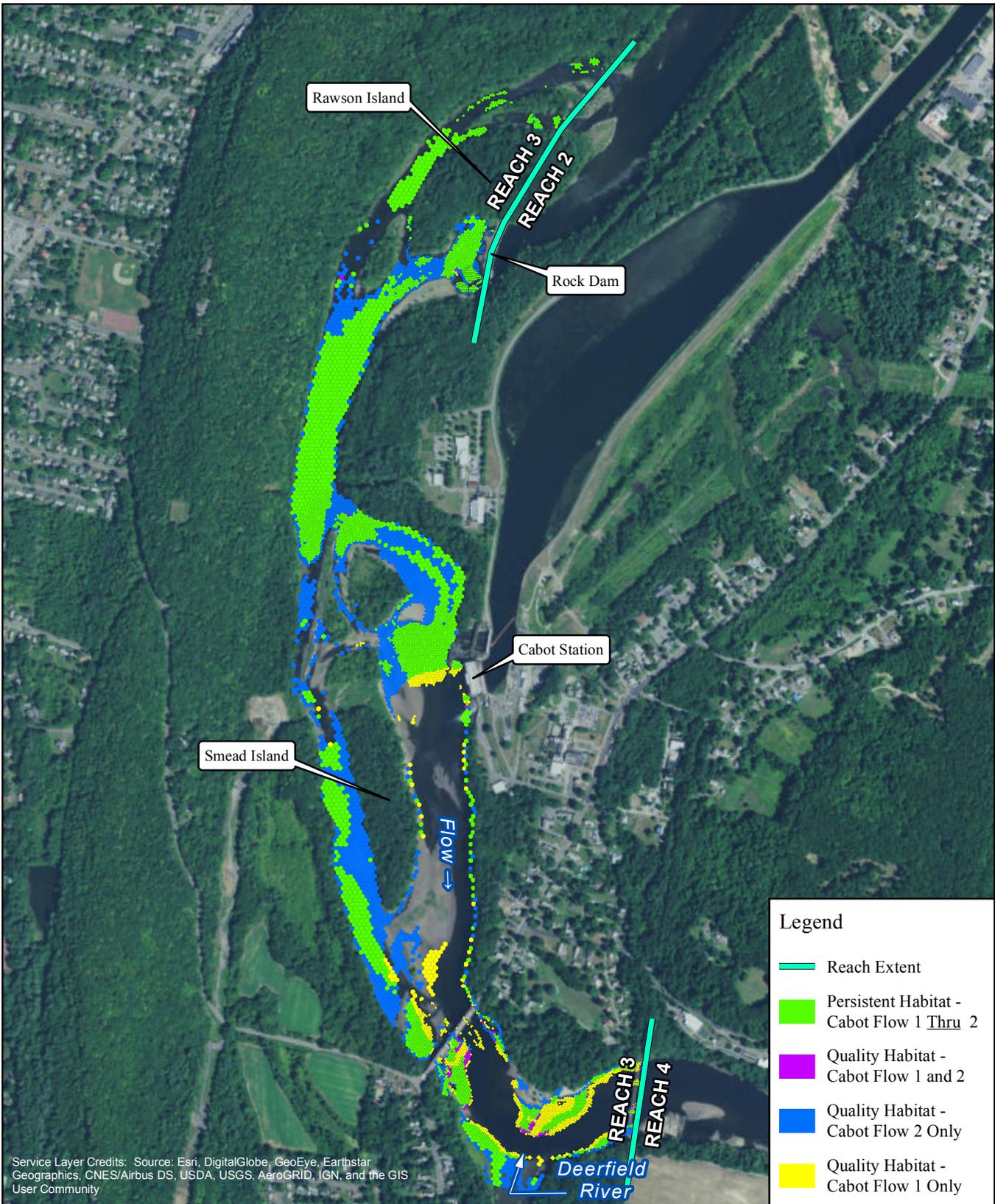
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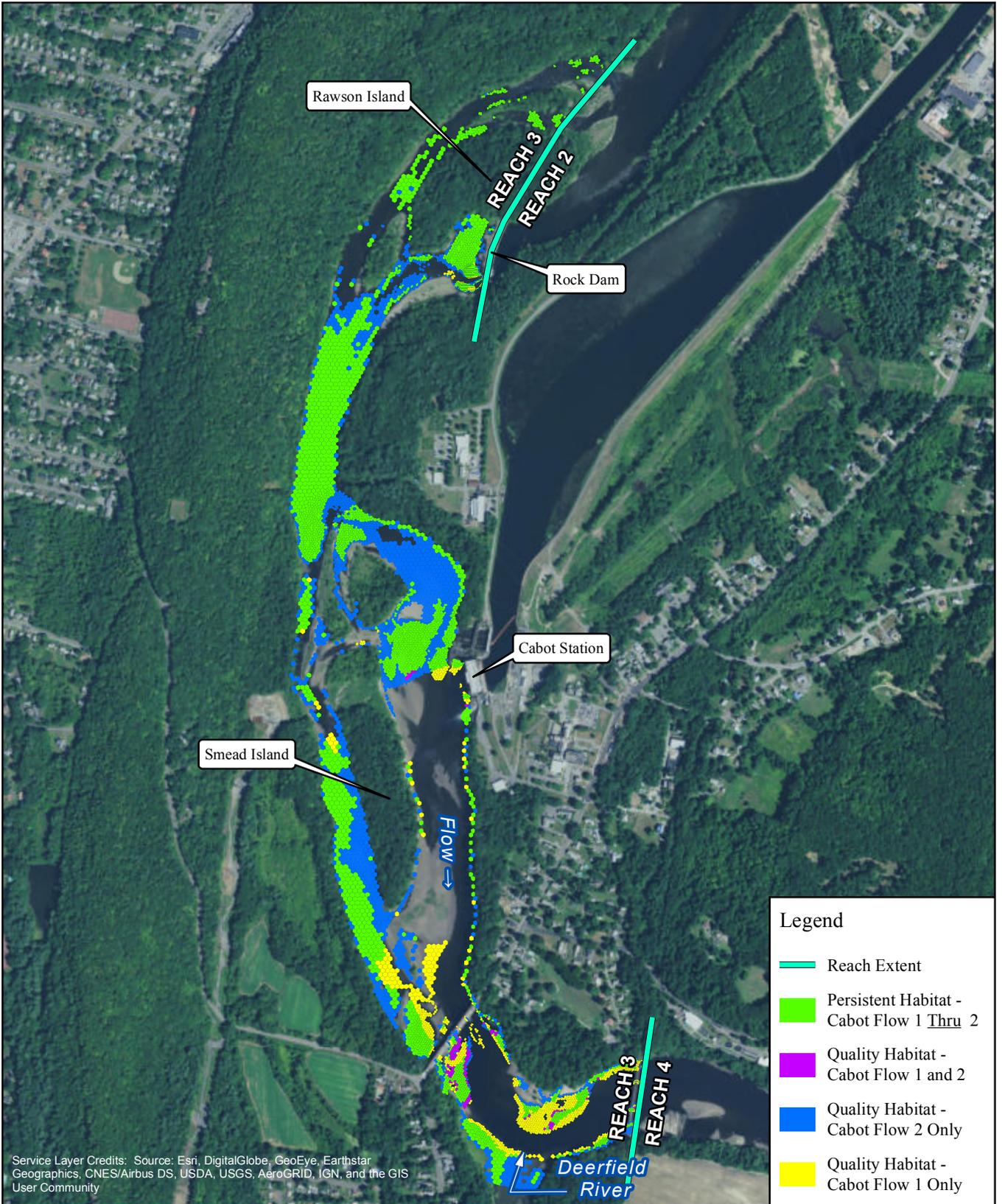


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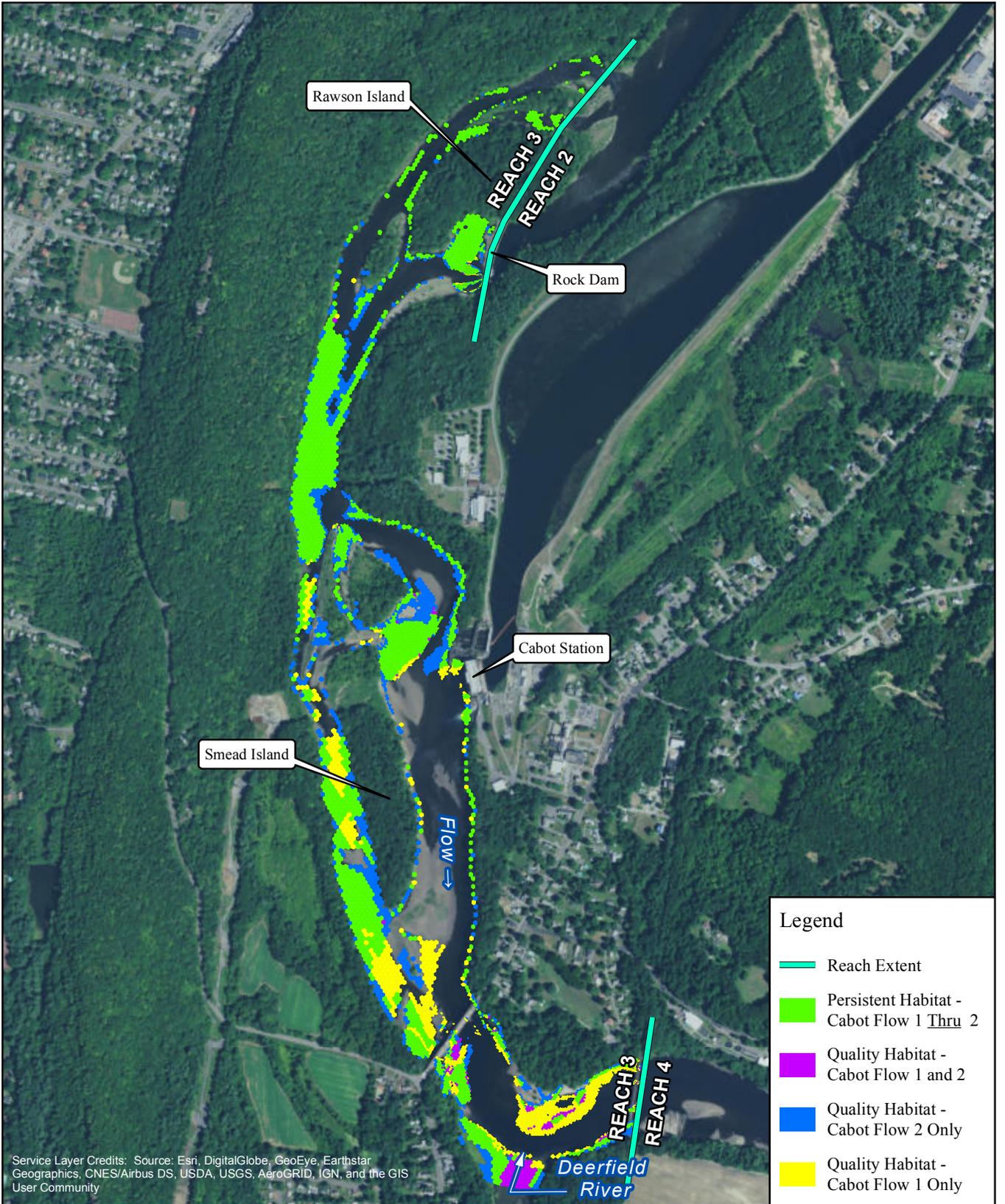
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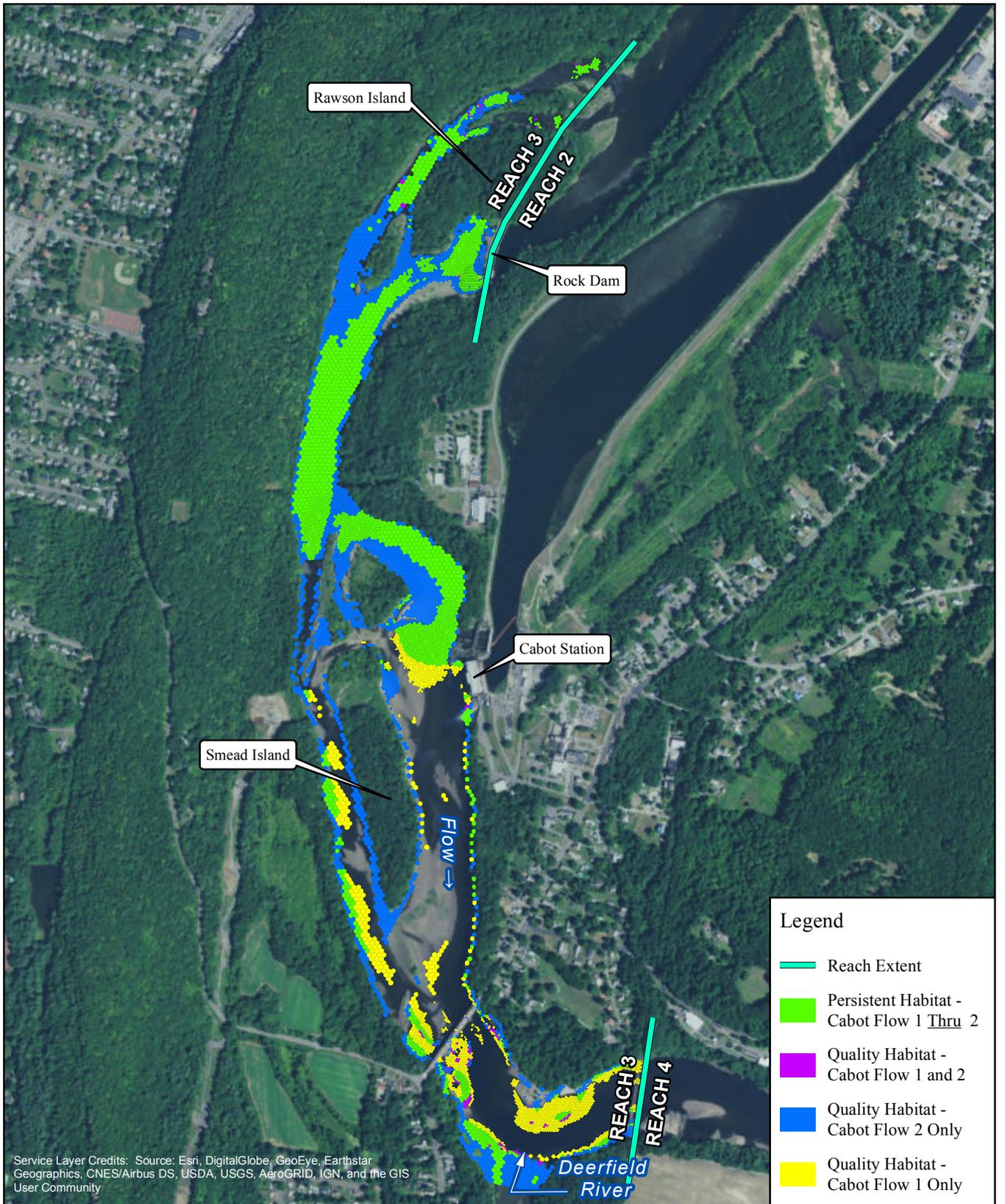
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Legend

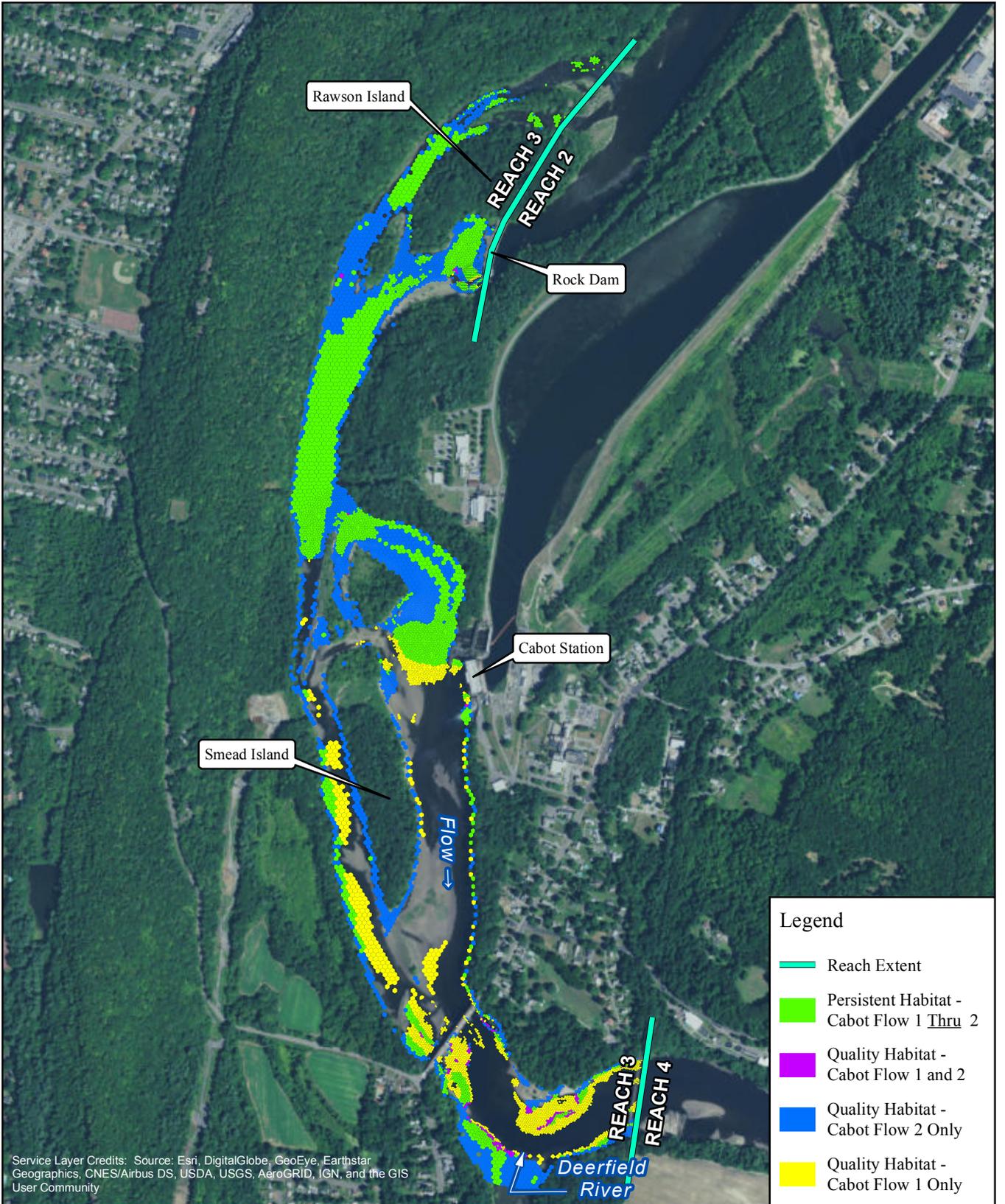
- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Deep-Slow_Guild-
 Bypass Flow: 200 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

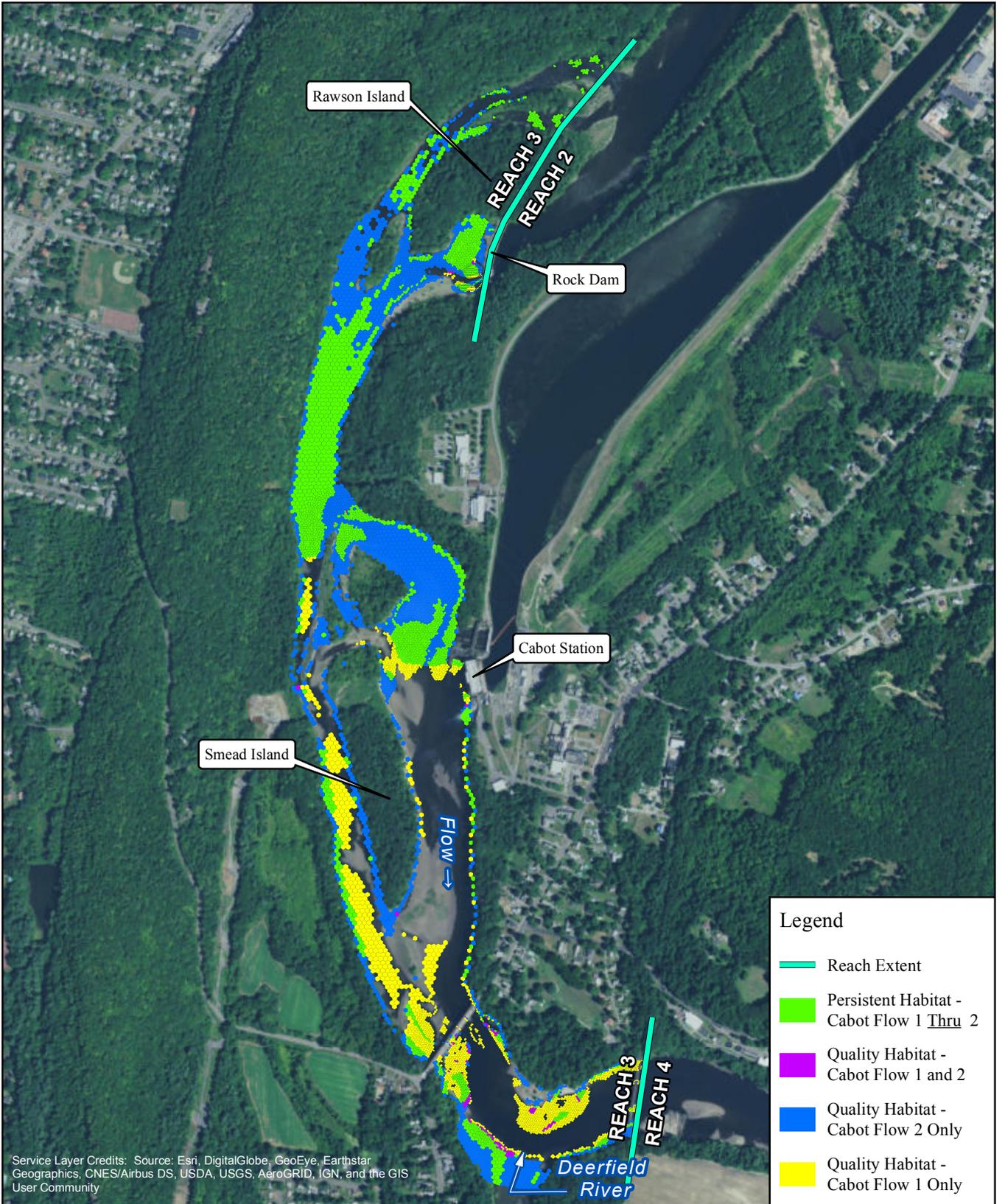
- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Deep-Slow_Guild-
 Bypass Flow: 500 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only



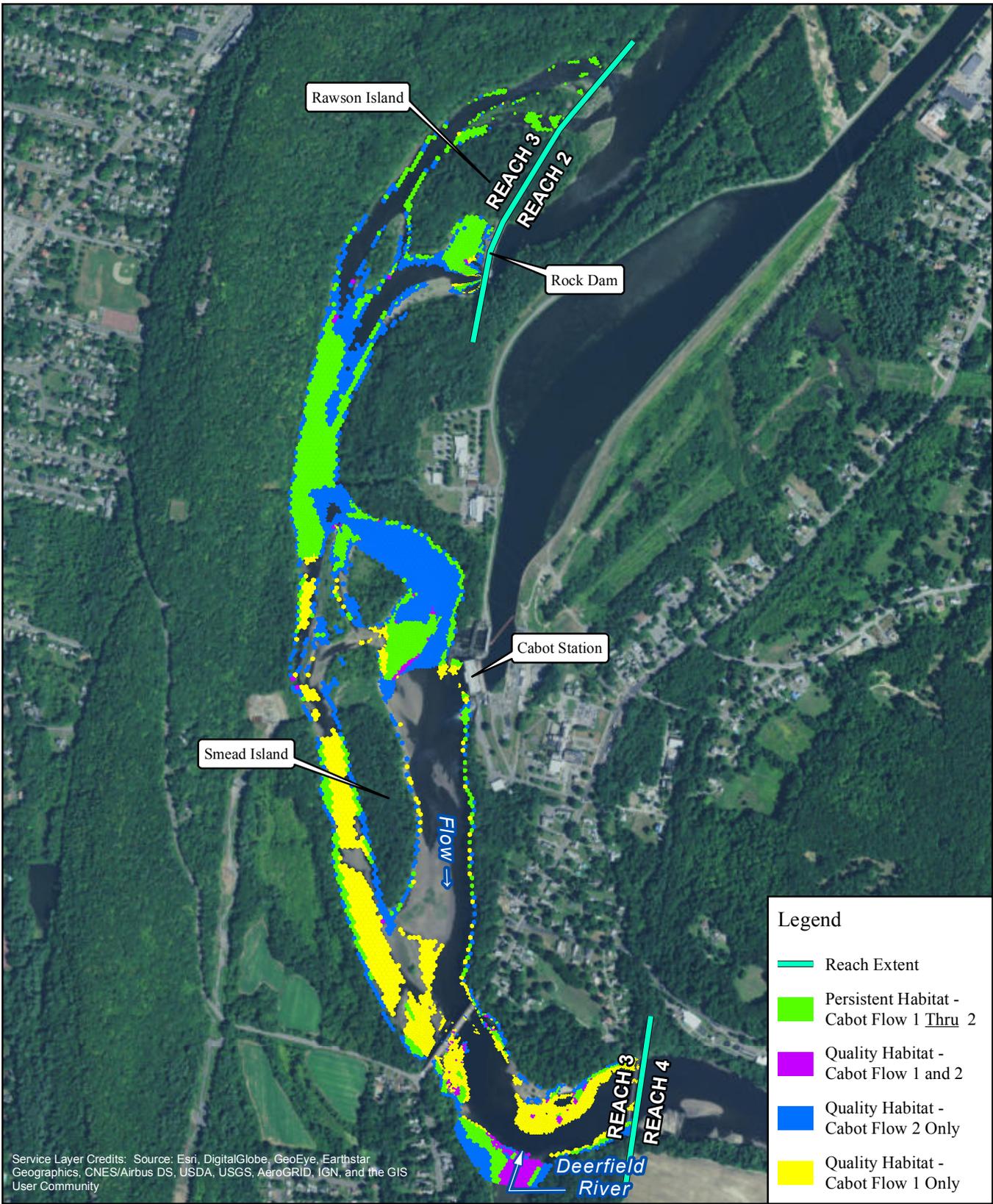
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 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889

RELICENSING STUDY 3.3.1



Persistent Habitat
 Deep-Slow_Guild-
 Bypass Flow: 1000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

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Legend

- Reach Extent
- Persistent Habitat - Cabot Flow 1 Thru 2
- Quality Habitat - Cabot Flow 1 and 2
- Quality Habitat - Cabot Flow 2 Only
- Quality Habitat - Cabot Flow 1 Only

FIRSTLIGHT HYDRO GENERATING COMPANY
 Northfield Mountain Pumped Storage Project No. 2485
 Turners Falls Hydroelectric Project No. 1889
RELICENSING STUDY 3.3.1

Persistent Habitat
 Deep-Slow_Guild-
 Bypass Flow: 2000 cfs
 Cabot Flow 1: 4500 cfs
 Cabot Flow 2: 14000 cfs

0 500 1,000 2,000 Feet

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