4. Article Two, B.5- Water Quality Monitoring ("WQM") Plan – Report on whether any of the semi-annual (or annual) WQM required under Article Two, B.5, was conducted during the quarter, and if so, in which sewer basins, and report the results of that monitoring (both BST and fecal coliform) for each such sewer basin.

The 2009 annual round of water quality monitoring was conducted on March 24, 2009. All 26 of the sewer basins were sampled (semi-annual and annual). Human source fecal bacteria were identified in one or more samples from six sewer basins. Results are presented below.

A limited round of water quality samples, from four stations in the Anacostia River watershed, was collected on June 26, 2009. Quarterly sampling from one station in each of four sewer basins is supplemental to the annual and semi-annual sampling program. Results will be reported in the Third Quarter of 2009.

Basins Subject to Semi-Annual Monitoring and Reporting Requirements:

a. **Broad Creek-**

Fecal Bacteria Results:

| | BST Results: | (Ente | rococcus CFU/1001 | ml) |
|---------------------|---------------------------------|-------|-------------------|-----|
| BRC001 – downstream | Too few bacteria for BST source | e | <10 | |
| (Henson Creek) | determination | | <10 | |
| BRC002 – upstream | Too few bacteria for BST source | e | <10 | |
| (Henson Creek) | determination | | | |

b. Cabin John-

Fecal Bacteria Results:

| | BST Results: | (Ente | rococcus CFU/100m | 1) |
|---------------------|---|-------|-------------------|----|
| CBJ001 – downstream | Too few bacteria for BST source determination | e | <10 | |
| CBJ002 – upstream | Too few bacteria for BST source | e | <10 | |

Horsepenc.

Fecal Bacteria Results:

| c. Horsepen | | cui Ductella Results. |
|---------------------|-----------------------------|-------------------------|
| _ | BST Results: (E | Enterococcus CFU/100ml) |
| | Human – 11% (13%) | |
| | Avian – 25% (26%) | |
| | Canine – 7% (6%) | |
| HSP001 – downstream | Deer – 11% (9%) | 2,276 (2,253) |
| | Horse – 19% (21%) | |
| | Misc. Wildlife – 18% (16%) | |
| | Non-human Unknown – 9% (9%) | |
| | Human – 4% | |
| | Avian – 32% | |
| | Canine – 9% | |
| HSP002 – upstream | Deer – 14% | 78 |
| | Horse – 15% | |
| | Misc. Wildlife – 16% | |
| | Non-human Unknown – 10% | |

Note: Values in parentheses for station HSP001 are for field duplicate sample.

d. Indian Creek-

Fecal Bacteria Results:

| | BST Results: | (Enterococcus CFU/100ml) |
|---------------------|---|--------------------------|
| INC001 – downstream | Too few bacteria for BST source determination | <10 |
| INC002 – upstream | Too few bacteria for BST source determination | <10 |

e. Little Falls-

Fecal Bacteria Results:

| | BST Results: | (Enterococcus CFU/100ml) |
|---------------------|----------------------------|--------------------------|
| | Human – 8% | |
| | Avian – 31% | |
| LFS001 – downstream | Canine – 15% | 70 |
| LF5001 – downstream | Deer – 13% | 70 |
| | Misc. Wildlife – 22% | |
| | Non-human Unknown – 11% | |
| | Human – 0% | |
| | Avian – 36% | |
| LESOO2 unatroom | Canine – 13% | 17 |
| LF3002 – upstream | FS002 – upstream Deer – 3% | 17 |
| | Misc. Wildlife – 34% | |
| | Non-human Unknown – 14% | |

f. Lower Anacostia-

Fecal Bacteria Results:

| I. Lower Anacostia- | ľ | ecal Bacteria Results: |
|---------------------|-------------------------|-------------------------|
| | BST Results: (| Enterococcus CFU/100ml) |
| | Human – 7% | |
| | Avian – 39% | |
| ANAOO1 downstream | Canine – 8% | 50 |
| ANA001 – downstream | Deer – 16% | 50 |
| | Misc. Wildlife – 23% | |
| | Non-human Unknown – 7% | |
| | Human – 4% | |
| | Avian – 44% | |
| ANA002 unstraam | Canine – 9% | 35 |
| ANA002 – upstream | Deer – 6% | |
| | Misc. Wildlife – 26% | |
| | Non-human Unknown – 11% | |

g. Lower Beaverdam Creek-

Fecal Bacteria Results:

(Enterococcus CFU/100ml)

| LBD001 – downstream | Too few bacteria for BST source determination | <10 |
|---------------------|---|-----|
| LBD002 – upstream | Too few bacteria for BST source determination | <10 |

BST Results:

Muddy Branchh.

Fecal Bacteria Results:

| | BST Results: | (Ente | rococcus CFU/100 | ml) |
|---------------------|---------------------------------|-------|------------------|-----|
| MDB001 – downstream | Too few bacteria for BST source | e | <10 | |
| WDB001 – downstream | determination | | <10 | |
| | Human – 0% | | | |
| | Avian – 39% | | | |
| MDD002 unstraam | Canine – 8% | | 12 | |
| MDB002 – upstream | MDB002 - upstream Deer $-15%$ | | | |
| | Misc. Wildlife – 29% | | | |
| | Non-human Unknown – 9% | | | |

i. **Northeast Branch-**

Fecal Bacteria Results:

| BST Results: | (Enterococcus CFU/100ml) |
|---------------------|--------------------------|
| | |

| | Human – 2% | |
|---|------------------------------|-----------|
| | Avian – 29% | |
| NEDO01 unstraam | Canine – 12% | 22 |
| NEB001 – upstream | Deer –18% | 22 |
| | Misc. Wildlife – 27% | |
| | Non-human Unknown – 12% | |
| | Human – 6% (7%) | |
| | Avian – 34% (31%) | |
| NEDOO2 downstroom | Canine – 11% (12%) | 105 (110) |
| NEB002 – downstream Califfe 117% (1278) Deer –5% (6%) | 105 (110) | |
| | Misc. Wildlife – 32% (31%) | |
| | Non-human Unknown – 12% (139 | %) |

Note: Values in parentheses for station NEB002 are for field duplicate sample.

j. **Northwest Branch-**

Fecal Bacteria Results:

| | BST Results: | (Ente | rococcus CFU/100m | ıl) |
|---------------------|---------------------------------|-------|-------------------|-----|
| | Human – 0% | | | |
| | Avian – 35% Canine – 10% | | | |
| NWA 001 dayynatraam | | | 16 | |
| NWA001 – downstream | Deer –8% | | | |
| | Misc. Wildlife – 33% | | | |
| | Non-human Unknown – 14% | | | |
| NW 4002 unstraam | Too few bacteria for BST source | e | <10 | |
| NWA002 – upstream | determination | | <10 | |

determination

k. Oxon Run-

Fecal Bacteria Results:

| k. Oxon Kun- | | recai Bacteria Results: |
|---------------------|-----------------------------|--------------------------|
| | BST Results: | (Enterococcus CFU/100ml) |
| | Human – 0% | |
| | Avian – 37% Canine – 11% | |
| OXN001 – downstream | | 16 |
| OXNOO1 – downstream | Deer – 9% | 16 |
| | Misc. Wildlife – 30% | |
| | Non-human Unknown – 13% | |
| | Human – 0% | |
| | Avian – 35% | |
| OXN002 – upstream | OXN002 – upstream | 20 |
| (Watts Branch) | Deer – 11% | 20 |
| | Misc. Wildlife – 33% | |
| | Non-human Unknown – 9% | |

l. Paint Branch-

Fecal Bacteria Results:

BST Results:

(Enterococcus CFU/100ml)

| PNT001 – downstream | Too few bacteria for BST source determination | <10 |
|---------------------|---|-----------|
| PNT002 – upstream | Too few bacteria for BST source determination | <10 (<10) |

Note: Values in parentheses for station PNT002 are for field duplicate sample.

m. Parkway-

Fecal Bacteria Results:

| BST Results: (Enterococcus CFU/100ml) |
|--|
|--|

| PKY001 – downstream (Bear Branch) | Human – 4% Avian – 35% Canine – 10% Deer – 7% Misc. Wildlife – 29% Non-human Unknown – 15% | 87 |
|--------------------------------------|--|-----|
| PKY002 – upstream (Walker Branch) | Too few bacteria for BST source determination | <10 |

n. Piscataway-

Fecal Bacteria Results:

| BST Results: | (Enterococcus CFU/100ml) |
|--------------|--------------------------|
| | |

| PSW001 – downstream | Too few bacteria for BST source determination | <10 |
|---------------------|--|---------|
| PSW002 – upstream | Human – 0% (0%) Avian – 31% (29%) Canine – 9% (10%) Deer – 17% (16%) Misc. Wildlife – 32% (33%) Non-human Unknown – 11% (12%) | 83 (90) |

Note: Values in parentheses for station PSW002 are for field duplicate sample.

Rock Creek-

Fecal Bacteria Results:

| | BST Results: | Enteroc | <i>occus</i> CFU/100m |
|---------------------|---------------------------------|---------|-----------------------|
| RKC001 – downstream | Human – 0% | | |
| | Avian – 37% | | |
| | Canine – 15% | 53 | 2 |
| | Deer – 8% | 33 |) |
| | Misc. Wildlife – 27% | | |
| | Non-human Unknown – 13% | | |
| RKC002 – upstream | Too few bacteria for BST source | , | 10 |
| | determination | <. | 10 |

Seneca Creekp.

Fecal Bacteria Results:

| • | BST Results: | Enterococcus CFU/100ml) |
|---------------------|---|-------------------------|
| SNC001 – downstream | Too few bacteria for BST source determination | <10 |
| SNC002 – upstream | Too few bacteria for BST source | <10 |

Sligo Creekq.

Fecal Bacteria Results:

| BST Results: | (Enterococcus | CFU/100ml) |
|--------------|---------------|------------|
| | | |

| | Human – 3% | | | |
|---------------------|-------------------------|--|----|--|
| | Avian – 33% | | | |
| SI C001 downstream | Canine – 21% | | 22 | |
| SLC001 – downstream | Deer – 3% | | 23 | |
| | Misc. Wildlife – 28% | | | |
| | Non-human Unknown – 12% | | | |
| | Human – 4% | | 70 | |
| | Avian – 29% | | | |
| SI COO2 | Canine – 15% | | | |
| SLC002 – upstream | Deer – 2% | | 78 | |
| | Misc. Wildlife – 34% | | | |
| | Non-human Unknown – 16% | | | |

Upper Beaverdam Creekr. RST Poculte.

Fecal Bacteria Results:

| 1. Opper Deaverdan | I CICCN- | recar Dacteria Results. |
|---------------------|---------------------------------|--------------------------|
| | BST Results: | (Enterococcus CFU/100ml) |
| | Human – 0% | |
| | Avian – 36% | |
| | Canine – 14% | |
| UBD001 – downstream | Deer – 16% | 55 |
| | Horse – 4% | |
| | Misc. Wildlife – 21% | |
| | Non-human Unknown – 9% | |
| LIDD002 unstroom | Too few bacteria for BST source | e <10 |
| UBD002 – upstream | determination | <10 |

s. Watts Branch-

Fecal Bacteria Results:

| or rraces branch | - | ı ccui | Ductella Results. | |
|---------------------|---|--------|-------------------|-----|
| | BST Results: | (Ente | rococcus CFU/100r | nl) |
| WTB001 – downstream | Too few bacteria for BST source determination | e | <10 | |
| WTB002 – upstream | Too few bacteria for BST source determination | e | <10 (<10) | |

Note: Values in parentheses for station WTB002 are for field duplicate sample.

t. Western Branch-

Fecal Bacteria Results:

| | BST Results: | (Ente | rococcus CFU/100 | ml) |
|----------------------|---------------------------------|-------|------------------|-----|
| WNB001 – downstream | Too few bacteria for BST source | ce | <10 | |
| WINDOOT – downstream | determination | | \10 | |
| WND002 unstroom | Too few bacteria for BST source | e | <10 | |
| WNB002 – upstream | determination | | <10 | |

Basins Subject to Annual Monitoring and Reporting Requirements-

a. Dulles Interceptor-

Fecal Bacteria Results:

| | BST Results: | (Enterococcus CFU/100ml) |
|--------|-------------------------|--------------------------|
| | Human – 0% | |
| | Avian – 33% | |
| DCI001 | Canine – 13% | 15 |
| DSI001 | Deer – 17% | 13 |
| | Misc. Wildlife – 26% | |
| | Non-human Unknown – 11% | |

b. Mattawoman-

Fecal Bacteria Results:

| | | BST Results: | (Ente | erococcus CFU/1001 | ml) |
|-----------|-------------|-------------------------------|-------|--------------------|-----|
| | MTW001 | Too few bacteria for BST sour | ce | <10 | |
| W11 W 001 | 1V11 VV 001 | determination | | <10 | |

c. Monacacy-

Fecal Bacteria Results:

| c. Mulacacy- | recai Dacteria Results. | | |
|--------------|---|-------|----------------------|
| | BST Results: | (Ente | prococcus CFU/100ml) |
| MCY001 | Too few bacteria for BST source determination | ce | <10 |

d. Patuxent Center-

Fecal Bacteria Results:

| | BST Results: | (Ente | prococcus CFU/100ml) |
|---------------|---------------------------------|-------|----------------------|
| PTC001 | Too few bacteria for BST source | ce | <10 |
| (Mill Branch) | determination | | <10 |

e. Patuxent North-

Fecal Bacteria Results:

| | BST Results: (| Ente | rococcus (| CFU/100ml _. |
|------------------|---------------------------------|------|------------|------------------------|
| PTN001 | Too few bacteria for BST source | • | <10 | |
| (Hawlings River) | determination | | <10 | |

 2^{nd} Quarter 2009 WSSC Consent Decree – Civil Action No. PJM-04-3679

f. **Rock Run-**

Fecal Bacteria Results: (Enterococcus CFU/100ml)

| | BST Results: | (Enter | <i>rococcus</i> CFU/100m |
|--------|---|--------|--------------------------|
| RCM001 | Too few bacteria for BST source determination | ce | <10 |