Table 9-1: Summary of Recommendations

No.	Recommendation Description	Est. Cost 2012 \$	Schedule	Responsibility				
				Admin	Fiscal			
Engineering - Short Term								
1.	 Backwater Valve (formerly Backflow Preventer) Program For approx. 200 homes with reported backups in summer 2012 Mandatory program DC Gov to install backwater valves ("backflow preventers") Homeowner maintains & signs waiver for future flooding Additional homes that experience backups in future Roll into program above Refine Bloomingdale/LeDroit Park Eligibility Area Public outreach to encourage backwater valve installation Rebate 90% up to \$5000, homeowner arranges for installation Continue with current program approx. 1,000 homes and continue until tunnel is complete. 	\$1-\$6 M	Implement until Northeast Boundary Tunnel constructed (10+/- years)	DC Water/ DGS/ DCRA	DC Water / District			
2.	Rain Barrel Program • Current funding up to 250 barrels; program in place	\$0.25 M	Underway	DDOE	DC Water			
3.	Green Infrastructure Program - DC Water will fund GI construction at Rhode island and First Street, to be constructed by DDOT, in accordance with MOU	\$ 1.1 M	1 yr	DDOT	DC Water			
Engineering - Medium Term								
4.	Construct Temporary Stormwater Storage at McMillan – approx. 6 mg	\$ 12 M	Place in service by April 2014 ⁽¹⁾	DC Water	DC Water / District			
5.	Construct First St NW Tunnel Construct approx. 6 million gallon, 2800' long, 19' inside diameter storage tunnel from Rhode Island and First St NW to southwest corner of McMillan site	\$ 132 M	Place in service by April 2016 ⁽¹⁾	DC Water	DC Water / District			
6.	Rain Barrel Program • Increase number of barrels available to public from 250 to 1,250 (increase of 1000) through rebate of rain barrel only (no installation services provided)	\$0.3 M	Next 3 years	DDOE	DDOE			
7.	 Green Infrastructure GI in Bloomingdale & LeDroit Park drainage areas on public space 	\$10 M	5 yrs	DDOT	DDOT			
8.	 Engineering Consultations and Flood Proofing Provide free engineering consultations Provide rebate of 90% up to \$3,000 for improvements made in accordance with engineering consultation 	\$0.375 M	Next 3 years	DGS/ DCRA	DC Water / District			

No.	Recommendation Description	Est. Cost 2012 \$	Schedule	Responsibility			
				Admin	Fiscal		
Engineering - Long Term							
9.	Advance construction of the Northeast Boundary Tunnel	\$ 500- 600 M	By 2022 ⁽¹⁾	DC Water	DC Water		
Regulatory							
10.	DCRA should be more proactive in investigating illegal basement apartments based on tips/complaints.	N/A	6 months	DCRA	N/A		
11.	 Future development in Bloomingdale/LeDroit Park sewershed (properties more than 1 acre) Allow sanitary discharges for future development On private and public property (new streets in new development) – require that stormwater peak discharge for post development be limited to predevelopment conditions for 25-year 24-hour storm. Return to standard DDOE stormwater regulations once Northeast Boundary Tunnel is in place. 	N/A	6 months	DCRA/ DMPED Office of Plan'g/ DDOE/ DDOT/ DC Water	N/A		
12.	 Require homeowners to provide proof that sewer backup rider has been purchased prior to reimbursing for backwater valve rebate Require real estate disclosure form when buying house acknowledging being offered or informed about sewer backup rider on insurance Require that insurance companies provide statement of additional optional coverage available, including for homeowner's and rental insurance 	N/A	6 months	DISB/ DCRA/ DGS	N/A		
13.	Require licensing for home inspectors, which would include procedure for inspecting backwater valve/grinder pump/sewage ejector	N/A	6 months	DCRA	N/A		
14.	Explore the need or benefit to reinstating the District of Columbia Soil and Water Conservation District.	N/A	6 months	DDOE	N/A		
Code	e Changes						
15.	For new construction or where renovation costs exceed 50% of assessed value, require grinder pump or sewage ejector system with battery backup if lowest floor elevation is lower than manhole rim.	N/A	6 months	DCRA/ DC Water	N/A		
16.	Require real estate disclosures when selling property if: Backwater valve or grinder pump system is present/not present and stated risks Amend existing disclosure form to include known sewer backup or surface flooding occurrences	N/A	6 months	DCRA/ DGS	N/A		
17.	Allow backwater valve to be installed on one lateral that serves properties with multiple floors (two laterals not required). Rain leaders must be disconnected.	N/A	6 months	DCRA/ DC Water	N/A		
18.	Threshold must be min 12" above curb elevation for basement entrances on new construction/renovations.	N/A	6 months	DCRA	N/A		
19.	Connect stairway drains to sump pump, grinder pump, or sewage ejector system for new construction / renovations.	N/A	6 months	DCRA/ DC Water	N/A		

Operation & Maintenance Components							
20.	Increase catch basin cleaning frequency in Bloomingdale/LeDroit Park to quarterly.	\$20k/yr	Start Jan 2013	DC Water	DC Water		
21.	Distribute sandbags to residents for advance preparation, not only in response to storm forecast.	\$55k	Start Jan 13	DPW	DPW		
Public Outreach Components							
22.	Establish regular program of door-to-door flier distribution with emergency response information.	N/A	Start Jan 2013	DPW	N/A		
23.	Install and operate variable message boards on RI Ave to issue flood warning and emergency response information.	\$100k	1 year	DDOT	DDOT		
24.	DOH and DMH organize roundtable with residents to discuss anxiety/stress/fear.	N/A	Start Jan 13	DOH/D MH	N/A		
25.	Educate homeowners about Backwater Valve installation and separate lateral requirements, including the possibility of waiver by code officials to allow single lateral connection. (Related to Recommendation 16)	N/A	Start Jan 13	DC Water	N/A		

Notes: 1. Schedules contingent upon District support as follows:

- a. City Administrator appoints champion, heading a task force that is empowered to direct agencies
- b. District dedicates agency staff authorized to make decisions located with DC Water project team
- c. DC Water obtains power of Eminent Domain and District exercises power of Eminent Domain as necessary
- d. District grants all necessary easements to DC Water
- e. District grants necessary District property to DC Water for permanent facilities and for construction
- f. District provides expedited permits with dedicated staff
- g. District allows necessary street closures, work hours, etc. for construction operations.
- h. Permit fees are waived
- 2. Approximately \$40 million in additional funding required for the McMillan Stormwater Storage and an enhanced tunnel at First Street will be funded through one of the following:
 - Debt issuance by DC Water, with debt service payments made through transfers from the District's annual
 operating budget in the amount needed to pay the additional infrastructure financing
 - b. Debt issuance by DC Water with increased rates from District ratepayers for the term of the project financing
- 3. Costs identified as the fiscal responsibility of the District of Columbia government have been recognized and will be included within the Mayor's Fiscal Year 2014 operating or capital budget submission. However, where funding is not currently identified, actual implementation of recommendations will be dependent upon funding and budget approvals.