

**REPORT OF THE ORPHAN STORMWATER
GRANT PROGRAM YEAR 2**

STATE FISCAL YEARS 2007 - 2008

{ 10 V.S.A. § 1264c }

Submitted to the Vermont General Assembly By:

Department of Environmental Conservation

Agency of Natural Resources

January 15, 2008

EXECUTIVE SUMMARY

Since May 2006 the DEC Water Quality Division's Stormwater Section has been involved in the implementation of an "Orphan Stormwater System" pilot project. This project was created to facilitate cooperation and to provide financial assistance between the State, property owners, and municipalities for the purpose of renewing expired stormwater permits and the repair of degraded stormwater systems. The project has dedicated approximately .66 FTE of permanent staff and has hired two full time temporary employees to research and inspect in the field about 100 permitted drainage systems meeting the "orphan" definition. "Orphan" stormwater systems are stormwater systems that meet the following criteria:

- a) the drainage system has an associated expired State discharge permit;
- b) the drainage system serves a residential subdivision, in whole or in part;
- c) the developer/original permittee or the successors in development no longer have any ownership in the subdivision; and
- d) the drainage system does not discharge to a Clean Water Act 303(d) listed stormwater impaired waterway.

This report summarizes activities during Year 2 of the pilot project. The pilot project was funded with \$600,000 in capital funds. In January 2007 the number of expired orphan system permits eligible for funding was 72. These permits involved no less than 1200 individual landowners. At the close of the grant period on January 31, 2007 the Stormwater Section had received 26 grant applications requesting \$468,418. As of November 2007 the Stormwater Section had authorized 21 grant awards totaling \$526,166.

To date this project has found a resolution for 41 of the 72 permits (57%) that were eligible for a grant. These resolved permits involved 692 individual landowners. Of the remaining unresolved permits 18 are entirely on private property. To date no municipality has applied for a grant for a private orphan stormwater system. In July 2007 the Stormwater Section determined that private homeowner associations could be eligible for orphan financial assistance (OFA) if they were to obtain permission from their respective municipality to form a fire district; fire districts qualify as "municipalities." As a formal fire district the landowners would be eligible to apply for an orphan grant. As of November 2007 one private homeowners association has completed the steps necessary to apply for an orphan grant. This option may be one way to resolve the remaining grant eligible orphans.

Consistent with the recommendations of the Year 1 report the 2007 legislative session waived application and administrative fees associated with orphan residential permits where the municipality has agreed to be the permittee or a copermittee on the renewal application. It is expected that the 2008 legislative session will also waive the annual operating fee for permits where the municipality has agreed to participate in the permit renewal. These waivers are important incentives for engaging municipal responsibility in these permits.

The repair and maintenance of the orphaned stormwater drainage systems is estimated to significantly reduce sediment pollutant loading to Vermont's surface waters. A calculation of the pollutant reduction is provided in the Year 1 report.

INTRODUCTION

This report is submitted to the 2008 Vermont State Legislature and is required under Section 7 of Act 154 of the 2006 Vermont State Legislature. This report summarizes the implementation by the Agency of Natural Resources (ANR) of the orphan stormwater system, construction, renovation or repair pilot project (10 V.S.A. § 1264c.) This project was created to facilitate cooperation and financial assistance between the State, property owners, and municipalities for the purpose of renewing expired residential stormwater permits and the repair of degraded stormwater systems. This report covers the activities of the pilot project in Year 2. A summary of Year 1 is available under a separate cover.

The orphan stormwater system pilot project became effective on May 23, 2006 following the adoption by the Department of Environmental Conservation of the "Procedure for Phase I of a Program for Funding Upgrades to Existing "Orphaned" Stormwater Management Systems in State Waters that are not Principally Impaired Due to Stormwater Runoff". In this report the orphan financial assistance grant program will be referred to by the acronym OFA.

BACKGROUND

Since the 1970's the ANR has issued individual discharge permits to protect the water resources of the State from stormwater runoff. Since 1978 the construction of a threshold acreage of impervious surface has triggered the requirement for a discharge permit. Individual stormwater discharge permits typically have a life of 1-5 years. Due to ANR staff shortages most stormwater permits, once expired, were not renewed between 1978 and 2002. By 2002 there were almost 1500 expired permits backlogged at the ANR. Due to funding limitations and lack of staff resources, issued discharge permits were not adequately tracked for permit renewal, current permittee, permit transfer to new owners, or annual permit maintenance requirements and annual operating fees. As a result the current permittee, current maintenance condition and in many cases the location of a project were unknown at the time of the creation of the OFA project.

"Orphan" stormwater systems are stormwater systems that meet the following criteria, as defined in Act 154 (Sec. 5. 10 V.S.A. § 1264c (e)):

- a) the drainage system has an associated expired State discharge permit;
- b) the drainage system serves a residential subdivision, in whole or in part;
- c) the developer/original permittee or the successors in development no longer have any ownership in the subdivision; and
- d) the drainage system does not discharge to a Clean Water Act 303(d) listed stormwater impaired waterway.

Since 2001 the ANR Water Quality Division, Stormwater Section, has managed the State stormwater discharge permit program. Since August 2002 the ANR has had adequate staff resources and a general permit in place that allows for the renewal of previously expired discharge permits in waterways not principally impaired by stormwater. This permit is General Permit 3-9010 (Amended General Permit for Previously Permitted Stormwater

Discharges to Waters that are not Principally Impaired by Regulated Stormwater Runoff). Since August 2002 the Stormwater Section has reauthorized 666 expired discharge permits under General Permit 3-9010. As of November 2007 a permit backlog of 1490 expired discharge permits has been reduced to 158 (90%). Of these remaining 158 permits about 69 are for commercial, industrial or transportation land uses and the remaining 89 are for residential land uses.

ACTIVITY UNDER ACT 154

Between February 2007 and January 2008 the Stormwater Section has employed one full time temporary employee to assist in the renewal of expired residential stormwater discharge permits. In addition, another .66 full time permanent employee has been utilized.

During Year 2 the OFA staff met with municipal staff where orphan systems are located and provided technical assistance on the permit renewal and grant application requirements. In addition numerous contacts were made via email or phone to resolve technical issues related to the stormwater treatment system design requirements and the State grant process.

OFA staff also provided technical assistance to residential landowners, municipalities and their consultants for permit renewals where the owners and municipality chose to renew the permit independently of the grant.

The Department of Environmental Conservation Facilities Engineering Division staff also provided assistance reviewing engineer's probable estimates for any grant request over \$25,000.

SUMMARY OF GRANTS AWARDED (154, Sec.7(1))

At the close of the grant period on January 31, 2007 the Stormwater Section had received 26 grant applications requesting \$468,418. Since this time 3 grant applications have been withdrawn. Adjustments in the grant request were made for a number of grants following the review of the engineer's probable construction estimate and following discussions with municipalities on all of the permit renewal requirements. As of November 2007 21 grants have been awarded totaling \$526,166; two grant awards are pending.

As of November 2007, 4 of the 21 permit reauthorizations funded by orphan grants have been completed. The grant allows municipalities up to two years to complete the necessary work for the permit renewal and to submit a technically complete permit application.

SUMMARY OF EXPIRED DISCHARGE PERMITS ELIMINATED AND EXPIRED PERMITS REMAINING (154, Sec.7(2))

Since February 2007, 82 permits have been removed from the original list of 114 unresolved expired residential permits. These permits were renewed, are currently under technical or administrative review for renewal, were determined to be under the regulatory

threshold, have received an OFA grant and will be renewed within two years, were determined to have never been built, have formally notified the Stormwater Section they will submit renewal applications, or were classified as discharging to stormwater impaired waters. These permits are shown as the shaded records in Table A. As of November 2007 the number of unresolved residential stormwater permits statewide has been reduced from 114 to 32. These permits are shown as the unshaded records in Table A.

Due to the expiration of stormwater discharge permits issued between the years 2002-2004, all of which were individual permits with a five year life span, there are several new expired residential permits not listed in the Year 1 report. Since 2004 stormwater discharge permits have been authorized under General Permit 3-9015 which has a 10 yr duration and requires the filing of the permit in the local land records and transfer of the permit by the original permittee to the successor permittee(s). The permit requires that in permit applications for residential subdivisions the developer and owners association, condominium association or other similar legal entity file as co-permittees. In addition the successor permittee(s) must show that it has read and is familiar with the terms of General Permit 3-9015 and agrees to comply with all the terms and conditions and it has adequate funding or other means to effect compliance with all the terms of permit coverage. These requirements should prevent the creation of any new orphan permits after 2008.

Of the original 114 expired residential permits 72 met the statutory definition of orphan described above. Since February 2007 these 72 grant eligible orphan permits have been reduced to 58. The status of these 58 permits is shown in Table B. As stated above 23 of the 58 permits have applied for OFA. As of November 2007 the Stormwater Section has had further contact with owners or municipalities associated with 10 additional orphan permits and will likely resolve these without the need for financial assistance. This will leave 25 grant eligible orphan permits left unresolved.

SUMMARY OF MUNICIPAL ORPHAN APPLICATIONS (154, Sec.7(3))

In January 2007, of the 114 remaining expired residential permits at that time, 72 (Map A) were considered eligible for the first round of orphan grants.

At the close of the grant deadline on January 31, 2007 16 municipalities had applied for 26 orphan stormwater system grants. The final grant awards to each town and for each permit are shown in Table B. As of November 1, 2007 21 grant awards totaling \$526,166 have been made. Three grant applications were withdrawn and two grant applications are still pending.

In the Year 1 OFA report it was noted that of the orphan permits eligible for financial assistance approximately one-half of these systems are entirely on private property with no public right-of-way associated with them. Municipalities are reluctant to become affiliated with these privately owned systems since they have no ownership in the property. No municipalities have submitted orphan grant applications for private orphan systems. However in July 2007 the Stormwater Section determined that private homeowner associations could be eligible for OFA if they were to obtain permission from their respective municipality to form a fire district on their own. As a formal fire district the

landowners would be eligible to apply for an orphan grant. As of November 2007 one homeowners association, Valley View of Fairfax (SW discharge permit 1-0626) has completed the steps necessary to apply for an orphan grant. The Town of Fairfax Select Board has approved the Valley View Homeowner's request to form a fire district and the homeowners association is currently (November 2007) preparing an orphan grant proposal.

SUMMARY OF MUNICIPAL INCENTIVES (154, Sec.7 (4))

A discussion of incentives to encourage municipal participation in the construction, renovation, repair or maintenance of orphan stormwater systems as required under Sec. 7(4) is located in the Year 1 report of the OFA project in the section entitled "Recommendations for Effective Enforcement and Management of State Discharge Permits (154, Sec.7(8))".

A discussion of "mechanisms proposed by municipal applicants for assuming responsibility for the permitting, operation and repair of a relevant orphan stormwater system" as required under Sec.7(1) is located in the Year 1 report, in the section entitled "Recommendations for Effective Enforcement and Management of State Discharge Permits (154, Sec.7(8))".

ANALYSIS OF CURRENT COSTS AND FUTURE FUNDING NEEDS ASSOCIATED WITH ORPHAN SYSTEMS (154, Sec.7(5))

As of November 2007 the Stormwater Section had received 26 orphan grant applications with a total funding request of \$526,166 after adjustments made during OFA staff review. Funding requests ranged from a low of \$800 to a high of \$158,000 with an average request of \$20,725 and a median request of \$3,725.

In the Year 1 report it was shown that, based on cost information submitted with the initial 26 orphan grant applications, on average, permits needing minor repairs have a cost range of \$1,800-\$6,000, permits needing moderate repairs have a cost range of \$6,000-\$15,500 and permits needing major repairs or upgrades have a cost range of \$15,500-\$100,000.

As previously stated there are 25 orphan permits still unresolved; of these orphans 17 are entirely on private property and 8 have at least some public ownership. Based on both the field inspection condition assessed by the OFA staff and the range in repair costs submitted in the 26 grant applications, the estimated cost to reauthorize the remaining 25 orphan permits is about \$182,400 (Table C).

The remaining balance in the orphan grant fund after the initial grant round is approximately \$40,000¹. Therefore it is estimated that an additional \$140,000 is needed to meet the financial assistance need for resolving the still expired and grant eligible orphan permits. An additional \$50,000 for personnel will also be needed to adequately address the permit backlog.

¹ The Valley View homeowners association (permit 1-0626) will be applying for a grant, estimated to be about \$35,000, and this amount is factored into the remaining balance provided.

**SUMMARY OF FAILED ORPHAN SYSTEMS & POLLUTION
ASSESSMENT (154 Sec. 7(6))**

The Year 1 report summarizes the 2006 field inspection of the expired residential stormwater systems and the 72 grant eligible orphan systems. The Year 1 report provides an estimate of sediment pollution from all the orphan systems, where data exists, as 509 tons/year. The report estimated that 255 tons of sediment per year wash-off will be prevented from reaching state waters if these orphan permits are renewed. The report also estimated that 11.25 tons of sediment per 200 feet of eroded swale per year reach state waters. The report was unable to document the number of linear feet of swale or calculate the cumulative total number tons of eroded swale sediment per year prevented from reaching state waters by the 72 permits but it is assumed to be significant.

**SUMMARY OF ENFORCEMENT ACTIONS ON STORMWATER
DISCHARGE PERMITS (154 Sec. 7(7))**

The Year 1 report summarizes the enforcement actions on expired residential permits taken to date.

**RECOMMENDATIONS FOR EFFECTIVE ENFORCEMENT AND MANAGEMENT
OF STATE DISCHARGE PERMITS (154 Sec.7(8))**

The Year 1 report summarizes the enforcement effort to date for expired stormwater discharge permits and includes the most recent enforcement policy for expired stormwater discharge permits.

The Year 1 report also summarizes municipal and ANR Stormwater Section positions on renewal of expired stormwater discharge permits.

SUMMARY

Several key observations can be made from the two years of OFA project experience regarding the status of expired residential stormwater discharge permits statewide:

(1) In most areas of the State outside of Chittenden County this is the first time (2006) the expired permit issue has been brought to the attention of the municipality. As a result there is a substantial learning curve in terms of understanding both the existence and future responsibilities associated with these permits. Consequently the municipalities have, in many cases, proceeded with caution in responding to the State and homeowner's concerns. It will be essential to give municipalities time to understand and respond to the expired discharge permit issue. Unfortunately, property transfers and property refinancing continue to put pressure on individual landowners to resolve expired permits before a municipality is ready to provide assistance.

(2) Some municipalities refuse to participate in the permit renewal process even when public property is involved. ANR may need to seek further enforcement action if these permits remain unresolved. Because of the time elapsed since the permit's original

authorization, and the lack of a single party to enforce against, these cases are very difficult to enforce. ANR has resolved to date 90% of the stormwater permit backlog.

(3) There continues to be across the State a noticeable difference in the effort made to locate expired stormwater discharge permits during deed research by Title Attorneys. Title Attorneys appear to be doing a much more thorough job in Chittenden County relative to other counties. In more distant counties many property transfers are proceeding without discovery of the title defect. Some property transactions appear to take place predicated on a permittee filing only a partially complete application for permit renewal. In some of these cases, there is little follow up on the part of the applicant to complete the application process following the property transaction.

(4) It seems unlikely that a number of expired residential discharge permits will ever be resolved unless additional funding and effort is made to work with the private landowners and their respective municipalities to allow for the creation of fire districts.

(5) The elimination of all fees associated with permit renewal and operation is very important as an incentive to municipal participation in the permit renewal process.

(6) To prevent future non-compliance issues, the Stormwater Section will need to devote resources to permit-condition compliance tracking. The permit compliance tracking work load includes recording of the registration of the reauthorized permit in the land records, annual and semi-annual inspection recording, and annual operating fee collection.

Orphan Project Staff

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Additional Information

The OFA project staff has developed an informational web site on orphan stormwater permits and drainage systems:

http://www.anr.state.vt.us/dec/waterq/stormwater/htm/sw_orphans.htm

Status of All Expired Residential Permits (11/01/2007)

Permit #	Project Name	Project Town	# of Lots	Date Permit Issued
Single Family				
1-0580	Ball Mountain Road Subdivision	Arlington	18	9/30/2002
3277-9010	Jasper Pines	Arlington	10	9/24/1990
3263-9010	Miller Woods	Barre	9	8/14/1989
2-0993	Subdivision at intersection of Berlin and Prospect Streets	Barre City	75	3/11/1982
2-1159	17 Lot Subdivision on Berlin and Prospect Streets	Barre City	17	10/30/1986
1-0605	The Sugar Woods	Barre Town	21	1/7/1988
2-0736	Holtsprings Development Stage 5	Bennington	79	9/19/1978
1-0668	Quail's Hill	Brattleboro	17	8/9/1988
1-0783	Wilson Woods	Brattleboro	23	1/20/1989
2-0815	Woodbine Estates	Brattleboro	2	2/29/1980
2-1089	Hillwinds North (formerly Black Mt. View Drive)	Brattleboro	14	4/22/1986
1-1088	Broadview Estates	Bristol	25	9/30/2002
2-0830	Patton Woods	Charlotte	8	3/28/1980
1-0972	Shady Grove	Chester	7	10/23/1990
3266-9010	Valleyfield	Colchester	1	7/1/1985
1-0588	Shulman Subdivision	Dorset	6	12/14/1987
2-1152	The Club at Overbrook	Dover	17	10/30/1986
1-1021	Elmore Mountain Road Subdivision	Elmore	1	5/16/1991
1-1125	Valentine Drive Subdivision	Enosburg	8	4/19/1993
1-0625	Buck Hollow Heights	Fairfax	15	3/3/1988
1-0626	Valley View Subdivision	Fairfax	10	3/3/1988
2-0801	Beliveau Subdivision	Fairfax	30 (9 built)	11/29/1979
4194-9010	Buck Hollow Heights on Rood Mill Road	Fairfax	10	1/25/1991
1-0738	Genge Subdivision	Fayston	4	10/16/1988
1-1532	Pete West PRD-Kay Drive	Georgia	8	4/14/2002
2-0750	Sherwood Forest Subdivision	Georgia	58	5/17/1982
1-0798	Sunnyside Subdivision	Hartford	18	2/3/1989
2-0764	Monument Road Subdivision	Highgate	18	6/3/1979
3719-9010	Hideaway Paradise Estates	Highgate	23	10/19/1984
1-0514	Hidden Pasture	Hinesburg	10	4/12/1988
1-1538	Boutin Estate Subdivision	Hinesburg	11	6/3/2002
2-0946	East Street Subdivision	Huntington	7	5/23/1981

Table A

Permit #	Project Name	Project Town	# of Lots	Date Permit Issued
Single Family (continued)				
1-0646	Patten Corp 20 lot subdivision	Jamaica	20	8/4/1988
1-0516	Snowflake Ridge	Jericho	9	11/3/1987
1-0642	Laisdell Pond	Jericho	10	3/24/1988
1-0510	Beaver Hollow Rd	Londonderry	9	5/12/1987
1-1329	Highland Views	Ludlow	21	3/31/2003
2-1087	Millsite Homes	Ludlow	13	3/31/1986
2-1143	Egypt Subdivision	Lyndon	44	10/7/1986
1-0507	South Hill	Manchester	6	5/13/1987
1-0807	John Rusin Subdivision	Manchester	4	4/9/1989
1-0849	Meadow Ridge Development	Manchester	13	10/10/1989
2-1185	North Ridge Run	Manchester	13	1/21/1987
2-1127	Pendbridge Subdivision	Manchester Village	10	9/5/1986
1-0885	Goodwin Subdivision	Milton	11	11/28/1989
1-0947	Edgewater Terrace	Milton	8	1/6/1990
2-0810	Herrick Hill	Milton	13	1/28/1980
2-1192	Desranleau Subdivision	Milton	7	7/1/1988
2-0821	Adams Hill Development	Newfane	9	3/10/1980
1-0816	Waisel Subdivision	Pownal	16	7/8/1992
2-1074	Bare Hill	Putney	5	12/20/1985
1-0918	Peet Farm Property Development	Richmond	8	10/26/1990
2-0169	Southview Subdivision	Richmond	44	8/8/1983
2-0977	Murray Farm Subdivision	Richmond	9	12/18/1981
2-1134	Deer Creek	Richmond	9	7/30/1986
1-0495	Winch Hill	Roxbury	15	5/7/1987
1-0707	Laverne Drive Subdivision	Rutland	17	4/19/1989
1-0537	Double Four Orchard Subdivision	Springfield	7	11/3/1987
1-0691	Guyette Circle and Bowles Lane	St Albans	28	9/12/1988
1-0577	McCracken Homestead Estates	St Albans Town	35	12/4/1987
1-0952	Meadow Crossing Subdivision	St Albans Town	23	7/31/1990
1-0506 sn/1	Adams Street	St Albans Town/City	20	12/31/1991

Permit #	Project Name	Project Town	# of Lots	Date Permit Issued
Single Family (continued)				
2-0763	Mt. Prichard subdivision	St George	6	6/3/1979
1-0863	Arlington Development Tract II	St Johnsbury	9	4/23/1990
2-0965	Arlington Development	St Johnsbury	37	9/21/1981
1-0532	Sterling Falls Gorge Subdivision	Stowe	2	10/6/1987
1-0875	Worcester Forest Subdivision	Stowe	7	2/25/1992
5021-9010	Dishmill Farm Homesites	Stowe	6	10/21/1994
3685-9010	Jones Court	Swanton Village	37	1/26/1988
1-0594	Pratt & Mallow Development	Underhill	4	12/30/1987
2-0813	Mt. Vista Subdivision	Underhill	6	2/5/1980
2-0828	Pine Ridge Road Subdivision	Underhill	12	3/20/1980
1-0936	Otter Creek Subdivision	Vergennes	33	7/2/1990
2-0635	Ice House Court	Vergennes	8	5/23/1985
2-0755	Sunset Drive	Vergennes	20	4/18/1979
1-0663	Central Park Residential Subdivision	Vernon	19	8/11/1988
1-1126	Upland Mowing	Waterbury	9	4/30/1993
1-1132	ESM Equities Subdivision	Waterbury	18	5/16/1993
2-1118	Smith Subdivision	Weathersfield	17	8/8/1986
1-0968	Deerfield Meadows	West Dover	20	12/6/1990
1-0509	Yale Heights Residential Subdivision	West Windsor	22	1/10/1991
1-0954	Woodcock Farms East	Weston	12	9/4/1990
2-1010	The Orchard	Weybridge	7	7/25/1985
2-0641	Garden Lane	Williamstown	9	5/30/1985
1-0970	Blackberry Ridge Estates	Williston	6	10/19/1990
Total = 85	Remaining = 29		Total =1351	Remaining =403
Multi-Family				
1-0316	Haviland's Privilege Townhouses	Bennington	1	7/9/1980
1-0602	South Street Condominiums	Bennington	40	8/8/1989
2-0903	Wintergreen Condos	Burke	12	11/13/1980
1-0676	Bay Ridge Estates	Colchester	20	8/18/1988
2-0975	Partridge Hill	Colchester	1	7/1/1985
3631-9010	Whispering Pines	Colchester	1	9/18/1978

Permit #	Project Name	Project Town	# of Lots	Date Permit Issued	
Multi-Family (continued)					
1-0226	Fiddlehead Condominiums	Fayston	1	2/22/1997	
2-1050	Colony Club Condos	Killington	1	7/1/1987	
2-0987	Magic Mountain Condos	Londonderry	15	2/19/1982	
2-1068	Riverview Farm Condos	Londonderry	17	12/20/1985	
2-0235	Brookhaven	Ludlow	1	7/1/1985	
2-0642	Bourne Brook Apts/Manchester East Condominiums	Manchester	32	5/20/1986	
2-0913	Lane Shop Condominiums (River Condo.)	Montpelier	1	7/1/1985	
2-1115	Lake Views Estates	Newport City	1	7/1/1987	
2-0129	Creekside	Shelburne	1	8/4/1982	
1-0671	Warner Drive	St Albans	7	8/9/1988	
1-0116	Mountain View Estates	St Johnsbury	48	5/1/1980	
2-0119	South Village	Warren	1	6/28/1982	
4080-9010	Dover Watch	West Dover	1	7/21/1982	
Total = 19	Remaining = 3		Total = 202	Remaining = 50	
Other					
1-0614	Partridge Run	Dover	21	1/21/1900	
3256-9010	Sunrise Valley	Hartford	41	3/5/1987	
2-1177	Milton Falls	Milton	49	1/21/1987	
3708-9010	Lake Memphremagog Views	Newport City	59	3/30/1981	
1-0572	Huntington Road Development	Richmond	18	12/14/1987	
1-1065	Summit Place	St.Albans Town	12	9/21/1988	
1-0484	Country Club Estates	Swanton	35	5/7/1987	
3814-9010	Crosby Farms	Vergennes	49	6/30/1993	
1-0898	Williamstown Business Center	Williamstown	13	1/15/1990	
Total = 9	Remaining = 0		Total = 297	Remaining = 0	
Mobil Homes					
2-0632	Woodside Manor	Hartland	53	5/21/1985	
Total = 1	Remaining = 0		Total = 53	Remaining = 0	
TOTAL	REMAINING	TOTAL	REMAINING	TOTAL	REMAINING
114	32	59	24	1874	453

[] = Former Expired Residential Permits/Resolved Permits

Status of All Residential Permits Meeting the Act 154 Definition of Orphan (11/01/2007)

Permit #	Subdivision Name	Municipality	Current Status	Grant Amount	# of Property Owners Affected by Grants	# of Property Owners in Other Resolution
1-0580	Ball Mountain Road Subdivision	Arlington	No resolution			
3277-9010	Jasper Pines	Arlington	Town involved, will resolve permit without grant application			10
1-0605	Sugar Woods	Barre Town	Orphan grant	\$3,637	23	
3263-9010	Miller Woods	Barre Town	Orphan grant	\$3,295	9	
2-0736	Holtsprings Development Stage 5	Bennington	Town involved, will resolve permit without grant application			79
1-0668	Quail's Hill	Brattleboro	Orphan grant	\$158,000	17	
1-0783	Wilson Woods	Brattleboro	Orphan grant	\$12,300	35	
2-1089	Hillwinds North (fka Black Mt. View Drive)	Brattleboro	Orphan grant	\$800	15	
2-0830	Patton Woods	Charlotte	No resolution			
3266-9010	Valleyfield	Colchester	Orphan grant	\$36,831.36	50	
1-0676	Bay Ridge Estates	Colchester	Owner working on permit renewal			20
3631-9010	Whispering Pines	Colchester	Orphan grant	\$99,912	39	
1-0626	Valley View Subdivision	Fairfax	Homeowners forming a Fire District and will apply for an orphan grant	NA	10	
2-0801	Beliveau Subdivision	Fairfax	No resolution			
4194-9010	Buck Hollow Heights on Rood Mill Road	Fairfax	No resolution			
1-0226	Fiddlehead Condominiums	Fayston	No resolution			
1-0738	Genge Subdivision	Fayston	Orphan grant	\$9,178	4	
2-0750	Sherwood Forest subdivision	Georgia	No resolution			
1-1532	Pete West PRD-Kay Drive	Georgia	No resolution			
1-0798	Sunnyside Subdivision	Hartford	No resolution			
1-0514	Hidden Pasture	Hinesburg	No resolution			
1-1538	Boutin Estate Subdivision	Hinesburg	No resolution			
1-0646	Patten Corp 20 lot Subdivision	Jamaica	No resolution			
1-0516	Snowflake Ridge	Jericho	Orphan grant	\$3,725	9	
1-0642	Laisdell Pond	Jericho	Orphan grant	\$1,020	10	
1-0510	Beaver Hollow Road	Londonderry	No resolution			
2-1143	Egypt Subdivision	Lyndon	No resolution			
2-1185	North Ridge Run	Manchester	No resolution			
2-0642	Bourne Brook Apts/Manchester East Condos	Manchester	Homeowners working on permit renewal			32
2-1127	Pendbridge Subdivision	Manchester Village	No resolution			
1-0885	Goodwin Subdivision	Milton	Town involved, will resolve permit without grant application			11
1-0947	Edgewater Terrace	Milton	No resolution			
2-0810	Herrick Hill	Milton	No resolution			
2-0821	Adams Hill Development	Newfane	No resolution			
3708-9010	Lake Memphremagog Views	Newport City	Orphan grant	\$15,577	62	
1-0918	Peet Farm Property Development	Richmond	Orphan grant	\$2,471.70	8	
2-0169	Southview Subdivision	Richmond	Orphan grant	\$6,000	47	

Table B

Orphan Status (continued)

Permit #	Subdivision Name	Municipality	Current Status	Grant Amount	# of Property Owners Affected by Grants	# of Property Owners in Other Resolution
1-0572	Huntington Road Development	Richmond	Orphan grant	\$22,688.71	19	
1-0495	Winch Hill	Roxbury	No resolution			
1-0707	Laverne Drive Subdivision	Rutland City	Orphan grant	\$4,000	17	
1-0537	Double Four Orchard Subdivision	Springfield	No resolution			
1-0671	Warner Drive	St Albans City	Orphan grant	\$11,468	7	
1-0952	Meadow Crossing Subdivision	St Albans Town	Town involved, will resolve permit without grant application			21
1-0506 sn/1	Adams Street	St Albans Town/City	Town involved, will resolve permit without grant application			11
2-0763	Mt. Prichard Subdivision	St George	No resolution			
2-0965	Arlington Development	St Johnsbury	Orphan grant	\$81,750	20	
1-0532	Sterling Falls Gorge Subdivision	Stowe	No resolution			
5021-9010	Dishmill Farm Homesites	Stowe	Orphan grant	\$3,200	7	
1-0484	Country Club Estates	Swanton	Orphan grant	\$2,950	35	
3685-9010	Jones Court	Swanton Village	No resolution			
1-0594	Pratt & Mallow Development	Underhill	No resolution			
2-0813	Mt. Vista Subdivision	Underhill	Town involved, will resolve permit without grant application			6
2-0828	Pine Ridge Road Subdivision	Underhill	Town involved, will resolve permit without grant application			12
2-0755	Sunset Drive	Vergennes	Orphan grant	\$5,700	20	
4912-9010	Otter Creek Village	Vergennes	Orphan grant	\$2,026	29	
1-0509	Yale Heights Residential Subdivision	West Windsor	Orphan grant	\$12,779	14	
1-0970	Blackberry Ridge Estates	Williston	No resolution			
4342-9010	Heins Estates	Williston	Orphan grant	\$3,081	25	
TOTAL						
58		35 Towns	23 applications, 10 in other resolution, 25 remaining	\$533,366	533	202

Table C

Cost Estimate for Remaining Orphan Systems (No resolution) – 11/1/2007

Single Family	Subdivision Name	Municipality	ROW	# of Lots	Cost Estimate
1-0580	Ball Mt Road Subdivision	Arlington	Public/Private	18	\$1,800
2-0830	Patton Woods	Charlotte	Private	8	\$1,800
1-0626	Valley View Subdivision ¹	Fairfax	Private	10	\$30,000
2-0801	Beliveau Subdivision	Fairfax	Private	30 (9 built)	\$15,500
4194-9010	Buck Hollow Heights on Rood Mill Road	Fairfax	Private	10	\$6,000
2-0750	Sherwood Forest Subdivision	Georgia	Public	58	\$1,800
1-1532	Pete West PRD-Kay Drive	Georgia	Private	8	\$1,800
1-0798	Sunnyside Subdivision	Hartford	Public/Private	18	\$15,500
1-0514	Hidden Pasture	Hinesburg	Private	10	\$1,800
1-1538	Boutin Estate Subdivision	Hinesburg	Private	11	\$1,800
1-0646	Patten Corp 20 lot Subdivision	Jamaica	Private	20	\$1,800
1-0510	Beaver Hollow Road	Londonderry	Private	9	\$15,500
2-1143	Egypt Subdivision	Lyndon	Public	44	\$6,000
2-1185	North Ridge Run	Manchester	Private	13	\$15,500
2-1127	Pendbridge Subdivision	Manchester Village	Private	10	\$1,800
1-0947	Edgewater Terrace	Milton	Public	8	\$1,800
2-0810	Herrick Road	Milton	Public	13	\$1,800
2-0821	Adams Hill Development	Newfane	Private	9	\$6,000
1-0495	Winch Hill	Roxbury	Public	15	\$15,500
1-0537	Double Four Orchard Subdivision	Springfield	Private	7	\$1,800
2-0763	Mt. Prichard Subdivision	St George	Private	6	\$6,000
1-0532	Sterling Falls Gorge Subdivision	Stowe	Private	4	\$6,000
3685-9010	Jones Court	Swanton Village	Public	37	\$1,800
1-0594	Pratt & Mallow Development	Underhill	Private	4	\$1,800
1-0970	Blackberry Ridge Estates	Williston	Private	6	\$6,000
25		20		365	\$166,900

Multi-Family	Subdivision Name	Municipality	ROW	# of Lots	Cost Estimate
1-0226	Fiddlehead Condominiums	Fayston	Private	1	\$15,500
1		1		1	\$15,500

TOTAL	Municipality	Priv/Pub	# of Lots	Cost Estimate
26	21	18/8	374	\$182,400

¹Valley View is currently pursuing a grant

Cost Estimates for Maintenance Level Categories			
<u>Minor</u>	<u>Moderate</u>	<u>High</u>	<u>Severe</u>
\$1,800	\$6,000	\$15,500	\$100,000

Map A

Orphan Stormwater Systems in Vermont

