

# Waitsfield Community Wastewater Loan Fund Program

VCDA Meeting

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Great Waters + Great Communities

## Waitsfield, VT:

Community Wastewater  
Loan Fund Program

Clean Water SRF-based,  
Town-administered  
program funding  
upgrades and expansions  
of privately-owned on-  
site wastewater  
treatment systems



Resurging agriculture and a vibrant local food and drink economy is supported by on-site wastewater treatment funded through the community loan fund program



### A Home for Emerging Food Businesses in Waitsfield Vermont

Mad River Food Hub is a shared-use **USDA processing space, storage facility and local distributor** centrally located in the Mad River Valley of Vermont. Founded in 2011 with the aim of providing solutions for food entrepreneurs eager to bring their products to Vermont's vibrant local food market, MRFH has been a part of the success of many of Vermont's food artisans.



### Localfolk Smokehouse to Become a Brewpub








Project Purpose:  
*Find an affordable, incremental way to serve a burgeoning food sector and ensure flexible re-use of buildings*



Today: Five decentralized systems operating; addressing serious, unmet needs in commercial core:

3 serving food-related uses, with pre-treatment (AquaPoint Bioclere)

2 conventional systems without pre-treatment (office, retail)

System	Work Completed	Old Flow	New Flow	COST & MONTHLY PAYMENT
Winter Park 	Bioclere system; two new leach fields; pump station; renovated collection system; coordinated with pre-treatment for Lawson's Finest Liquids brewing/distilling	2,500	9,000	\$521,256 \$2,181/month – 5 users
Lin Property 	Expanded dispersal field & new tank	650	1,640	\$49,171 \$225/month
Localfolk Smoke House 	Add pre-treatment units and renovate dispersal field	3,450	3,450	\$46,698 \$210/month
Irasville Business Park 	Add pre-treatment (Bioclere), renovate dispersal fields, renovate force main (for Food Hub)	480	1,500	\$146,079 \$657/month
Town Offices 	New conventional gravity system for new town office building	n/a	600	\$15,000 n/a

**TOTAL INCREASED FLOW: 9,110 gpd/29%**

**TOTAL COST: \$778,204 or \$48/gallon**

## Program Structure

- Uses SRF to provide 20 year, 2.5% loans to private property owners for replacement, expansion or pre-treatment
- Used \$906k in left over STAG funds for planning, 15% subsidy to property owners
- Town voters bonded for \$750k to guarantee loans
- Four loans now in repayment
- Town repays CWSRF

	Amt	FY 2018	FY 2019	FY 2020	FY 2021
<b>PROJECT 1: WINTER PARK</b>					
Total Project Cost	\$521,255.95				
Town incentive	fixed				
Principal after Town incentive (final signed docs)	\$411,739.78	\$6,545	\$26,182	\$26,182	\$26,182
<b>PROJECT 2: IRASVILLE BUSINESS PARK SYSTEM</b>					
Total Project Cost	\$146,079				
Principal for payback after Town incentive	\$124,168	\$7,880	\$7,880	\$7,880	\$7,880
<b>PROJECT 3: LOCALFOLK SMOKEHOUSE</b>					
Total Project Cost	\$46,698				
Principal for payback after Town incentive	\$39,694	\$1,683	\$2,524	\$2,524	\$2,524
<b>PROJECT 4: LIN/CHINA FUN RESTAURANT</b>					
Total Project Cost	\$49,171				
Principal for payback after Town incentive	\$41,795	\$1,575	\$2,701	\$2,701	\$2,701

Sample monthly payments for different types of users:

Winter Park: Lawson's @ \$1,700/month

Winter Park: Small commercial, @ \$85/month

LocalFolk Smokehouse: @ \$210/month

## Timeline and Planning costs

1995: Feasibility study

2018: Systems built and in repayment

1995: Water/wastewater feasibility study

1997: First CWSRF borrowing

1997-2005: Engineering

2006: Failed bond vote

2009: Planning re-started

2013: New CWSRF loan; old loan starts repayment; start decentralized system engineering

2015: First phase of construction

2016-2017: Additional construction

2018: New system owners paying loans; Town repaying CWSRF

Total Owed by the Town through the failed bond vote: \$672,770

Engineering + Construction of decentralized systems:


\$778,204

+

"Soft Costs" = \$240,000/10 yrs

## “Soft” Costs?!

Money must be spent up front on more than just “hard engineering” to create a program, work with property owners & explain it to voters/Select Board

- 10 property owners
- 9 years 
- 8 real estate closings
- 6 sets of easements + loan documents
- 5 separate businesses in Winter Park’s wastewater system association
- 5 law firms
- 4 civil engineering firms
- 3 banks
- 2 different treatment technologies
- 2 bond votes
- 1 enforcement action
- 1 brush fire started during construction





# POLITICS: Landowners, Select Boards & Public

## CHALLENGES + SOLUTIONS

1. SHARED SYSTEMS = FORCED MARRIAGE:  
No unified management of the system or business park; Town had to impose order and cause the agreement to happen
2. Creating a structure with legal & financial assurances for a shared system with multiple owners - this is where many "Wastewater Needs Assessments" get stuck
3. Used Vermont Condominium association law to create a wastewater-only association – this works!
4. Provides for cash reserve, town audit authority, allocation of payment by flows, assignment of liability for malfeasance



Freshman in college



# FINANCE: Soft costs & cash flow are a reality



Graduated from college, works in  
banking in NYC

## CHALLENGES & SOLUTIONS

1. KEY CONCERN: AFFORDABILITY. 20-year, 2.5% works! (notwithstanding some objections about expense)
2. KEY NEED: Sufficient professional planning support to develop & explain financial projections.
3. Risk to the Town: Property owners escrowed \$5k for engineering/soft costs to participate; rolled into loan fund for those who moved ahead, refunded in 2 cases
4. Fairness: "Complicated" projects took up more planning capacity; how do you allocate that among multiple systems?
5. CWSRF can loan directly to private property owners – but Town's intervening support was ESSENTIAL
6. Mortgage subordination: Talk to your local banks n o w
7. CASH FLOW: Vermont Municipal Bond Bank required Town to (1) bond for the total amount loaned, even with legal agreements in place, and (2) pay costs up front with SRF reimbursement AFTER bonds were issued. BIG PROBLEM.

**SCIENCE**  
Still a “learn as  
you go” but it got  
a lot easier

## TREATING FOOD-RELATED WASTEWATER

1. KEY CONCERN: ENGINEERING KNOWLEDGE & CAPACITY. Had to build relationships, knowledge, comfort level with products and options
2. WASTE STREAM characterization was challenging, especially with brewing
3. Very little new capacity (gallons) needed, but enhanced treatment created flexibility
4. Contractors still are not experienced in the nuances of pre-treatment systems and some dispersal field techniques.

Graduated from college, 2<sup>nd</sup> year of veterinary school



The story goes on...  
...but we have functioning systems, affordable loans in repayment, taxable redevelopment, and beer.



Juli Beth Hinds, AICP  
Principal

New England \* Great Lakes \*  
California + Pacific

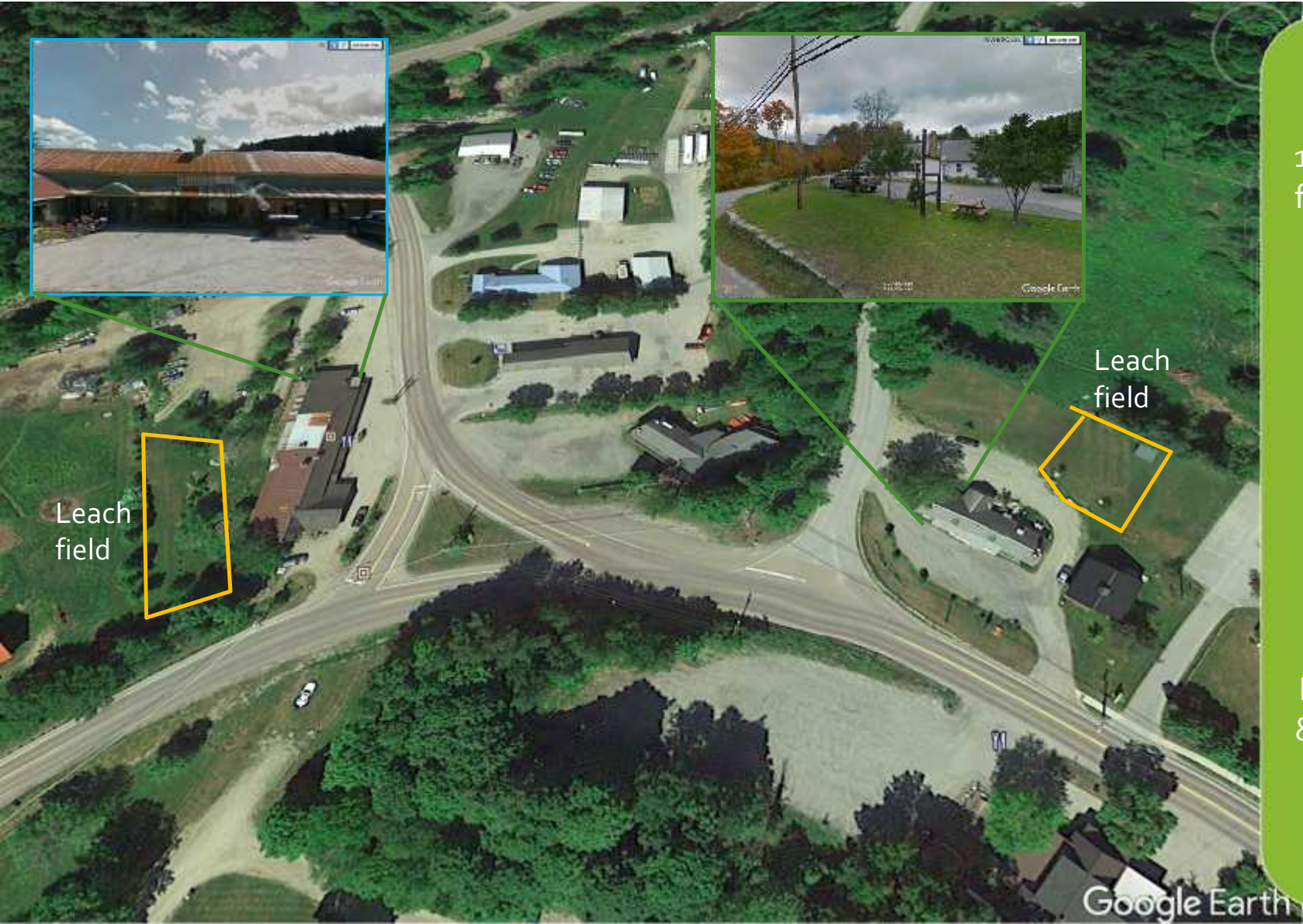
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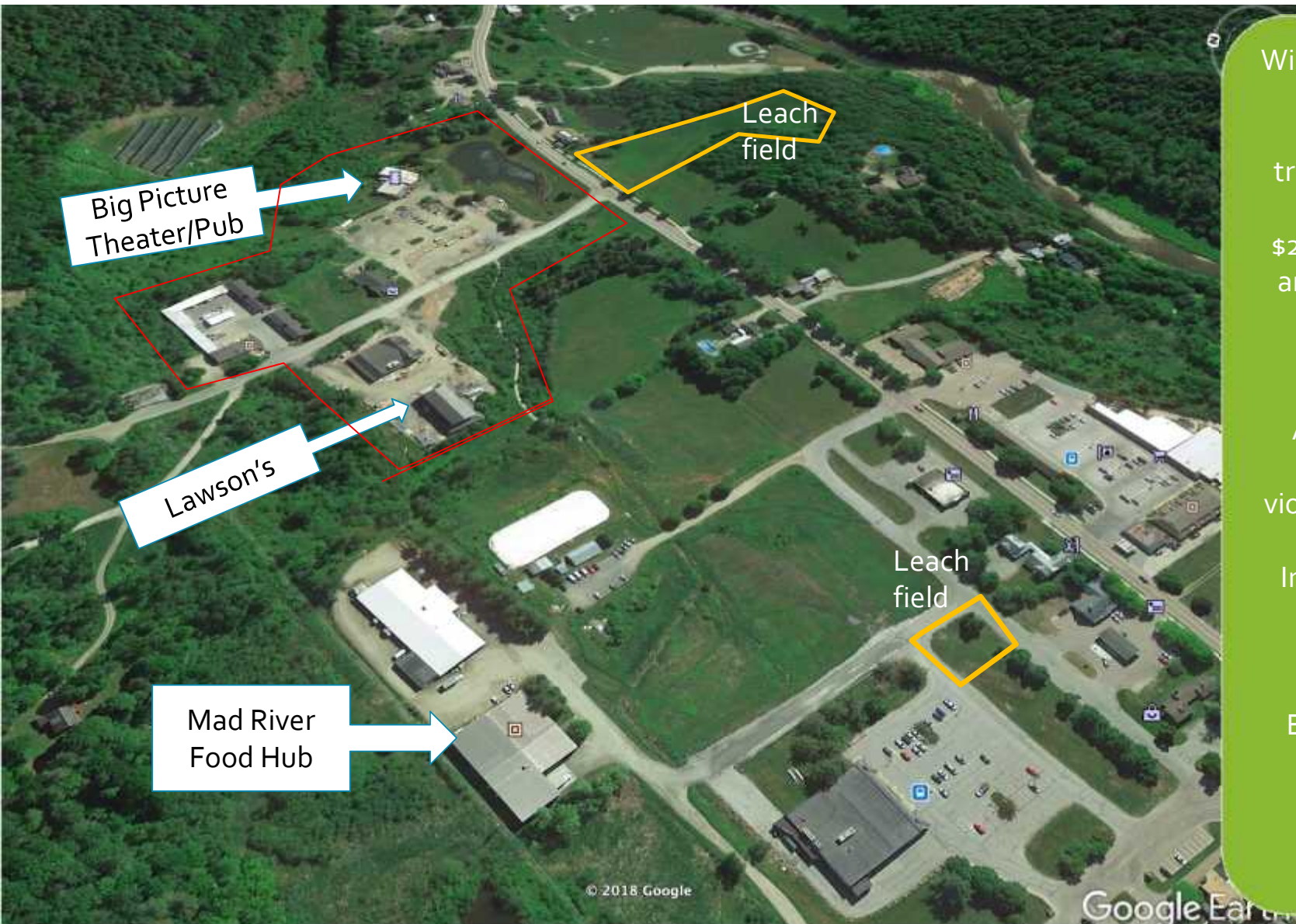
Leach field

Leach field

China Fun Restaurant (right)  
 1,640 gpd (expanded from 690) – supports restaurant + apartment or retail  
 Expand leach field, new larger tank  
 \$49,000 total cost  
 \$225/month

LocalFolk Smokehouse (left)  
 3,450 gpd (no expansion)  
 Renovate leach field & add pre-treatment  
 \$47,000 total cost  
 \$210/month

Google Earth



Winter Park system (top)  
9,000 gpd  
Bioclere® plus pre-treatment @ Lawson's  
\$522,000 total cost  
\$2181/month pro-rated among users based on design flow  
Wastewater-Only Condominium Association governs flows, allocation, violations, non-payment

Irasville Business Park (Food Hub) system (bottom):  
1,500 gpd  
Bioclere® treatment system  
\$146,000 total cost  
\$657/month loan payment



Warren Elementary School  
1<sup>st</sup> Advantex™ textile treatment  
system & shallow pressurized  
leach field in VT (1999-00)

Replaced failed leach field under  
Kindergarten playground, where  
effluent began surfacing in  
December. Awesome.