



INNOVATION IN RESTORATION

James Proudfoot

IRRIGATION PROBLEMS & SOLUTIONS



KEEPING THE PLANTS ALIVE

NINJA TOOL
#133: WATER



IRRIGATION OPTIONS



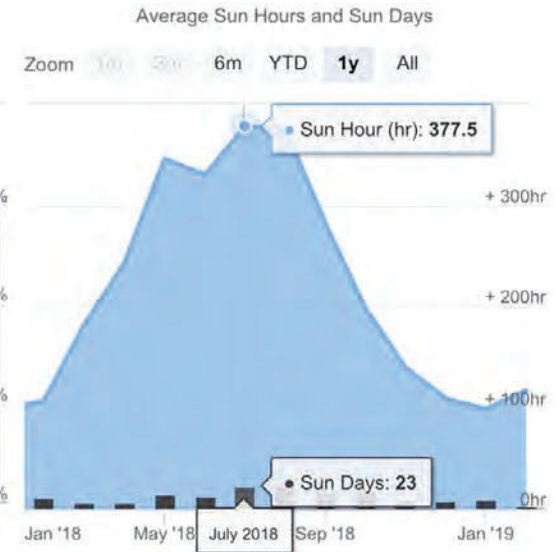
Hope for rain



Hire a water truck



Install a gas pump
and irrigation
system



USING NATURE



WATER TRUCK

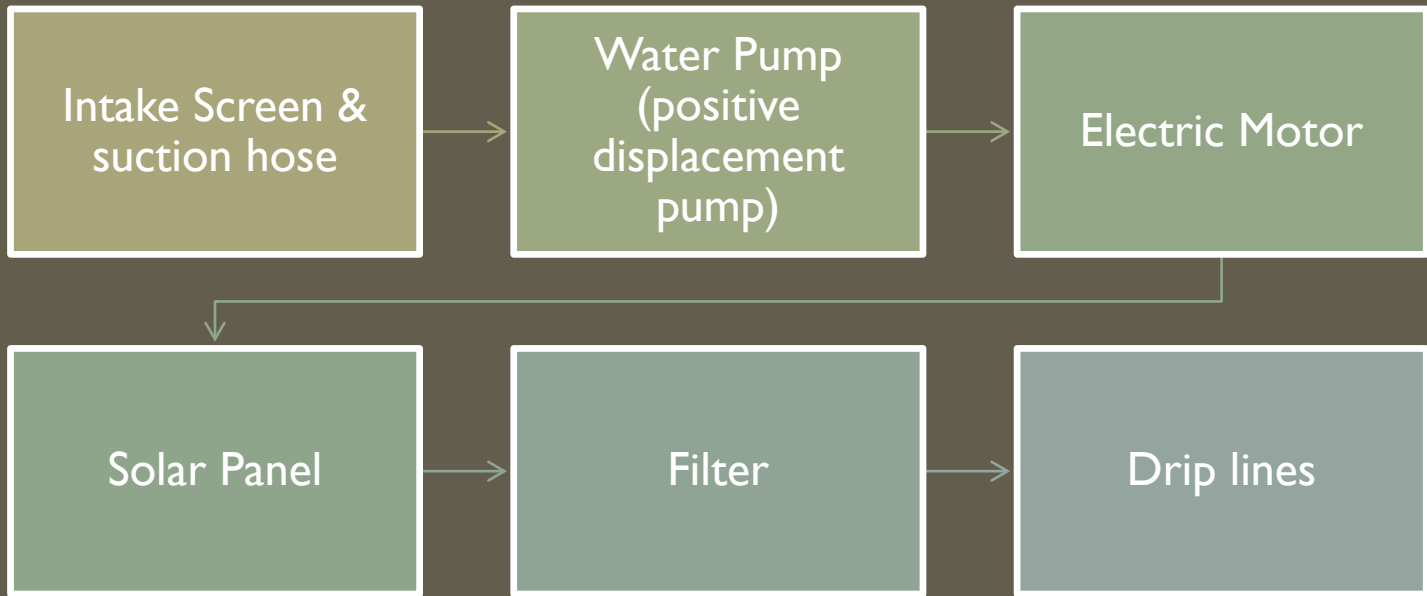


GAS PUMP

OUR IRRIGATION SOLUTION



SOLAR IRRIGATION



COMPONENTS

A QUICK LOOK AT OUR
SOLAR PUMP IN THE
FIELD



WHAT ARE THE
BENEFITS OF OUR
SYSTEM?

LEAF NINJA'S SOLAR IRRIGATION SYSTEM



Waters only when needed



Delivers water efficiently and effectively



Works on any site



Growth Stimulates



Vandal Proof



Reusable



Cost Effective



Low Maintenance

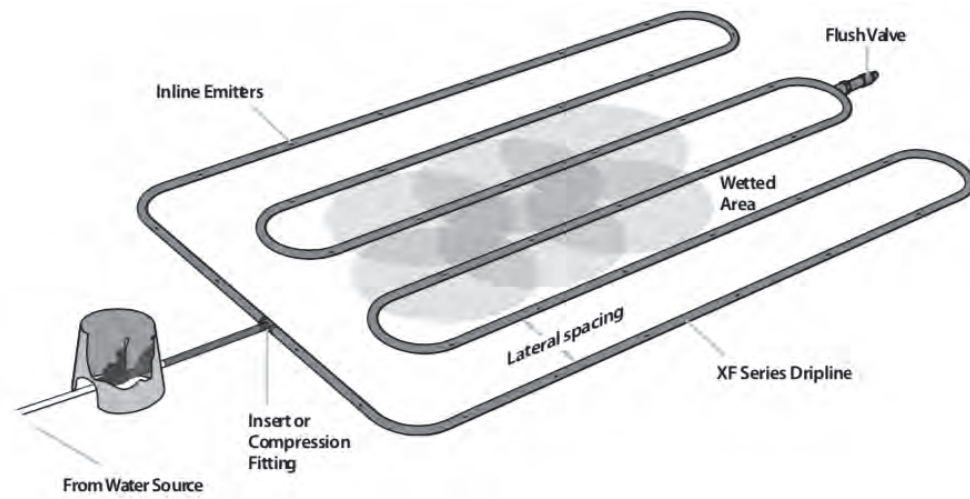
IT WATERS ONLY WHEN NEEDED



EFFICIENT DELIVERY



EFFECTIVE DELIVERY

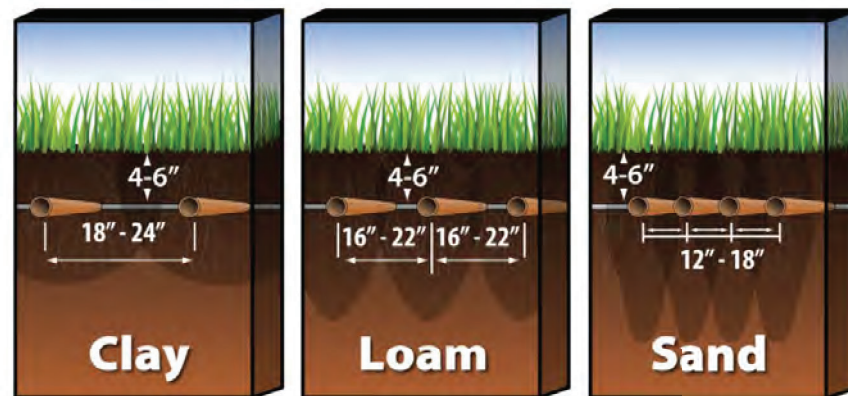




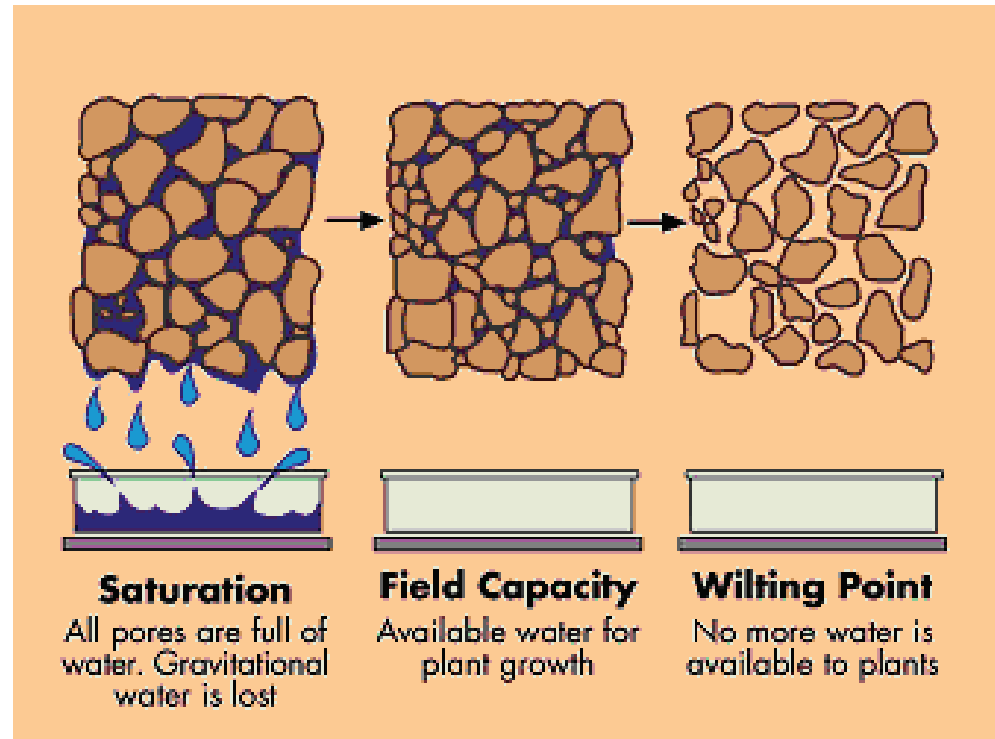
WATER REPELLENCE

EFFECTIVE
DELIVERY

DETERMINE SOIL TYPE
WHAT IS YOUR SOIL TYPE?



EFFECTIVE DELIVERY



Saturation

All pores are full of water. Gravitational water is lost

Field Capacity

Available water for plant growth

Wilting Point

No more water is available to plants

ADAPTABLE
TO MOST
SITES

One acre with low elevation is ideal site

Large site – add zones or multiple pumps

High elevation site – pumps in series

No water source site – pump from tanks

Remote sites – lightweight

Shaded sites – split solar from pump



BIO AND GROWTH
STIMULATES

Fertilizers
Mycorrhizae
Root Hormones

VANDAL RESISTANT

GPS Tracked

Steel Enclosed

Locked

Anchored

Fenced

Tempered Solar Panel

Internal Bolts



REUSABLE

- ✓ Easy to clean
- ✓ Modular design
- ✓ Simple to service
- ✓ Roll up drip line

COST
EFFECTIVE



No expenses for
labour



No fuel or electricity
required



No transportation
costs if drawing from
natural water source

WHAT ARE THE
MAINTENANCE
REQUIREMENTS?

MAINTENANCE



INTAKE SCREEN
CAN CLOG



SUCTION HOSE
CAN LOOSE
PRIME



FILTER CAN
CLOG

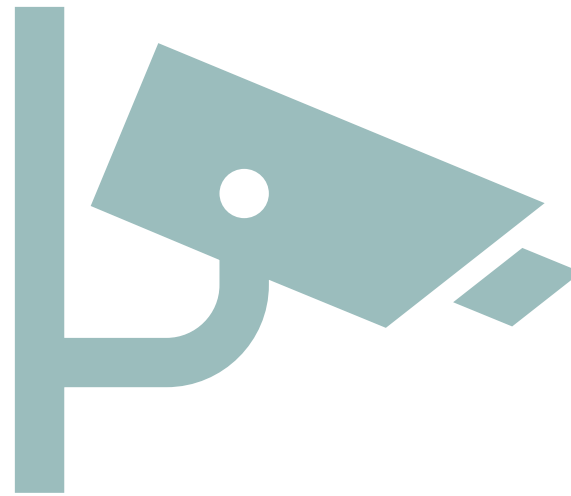


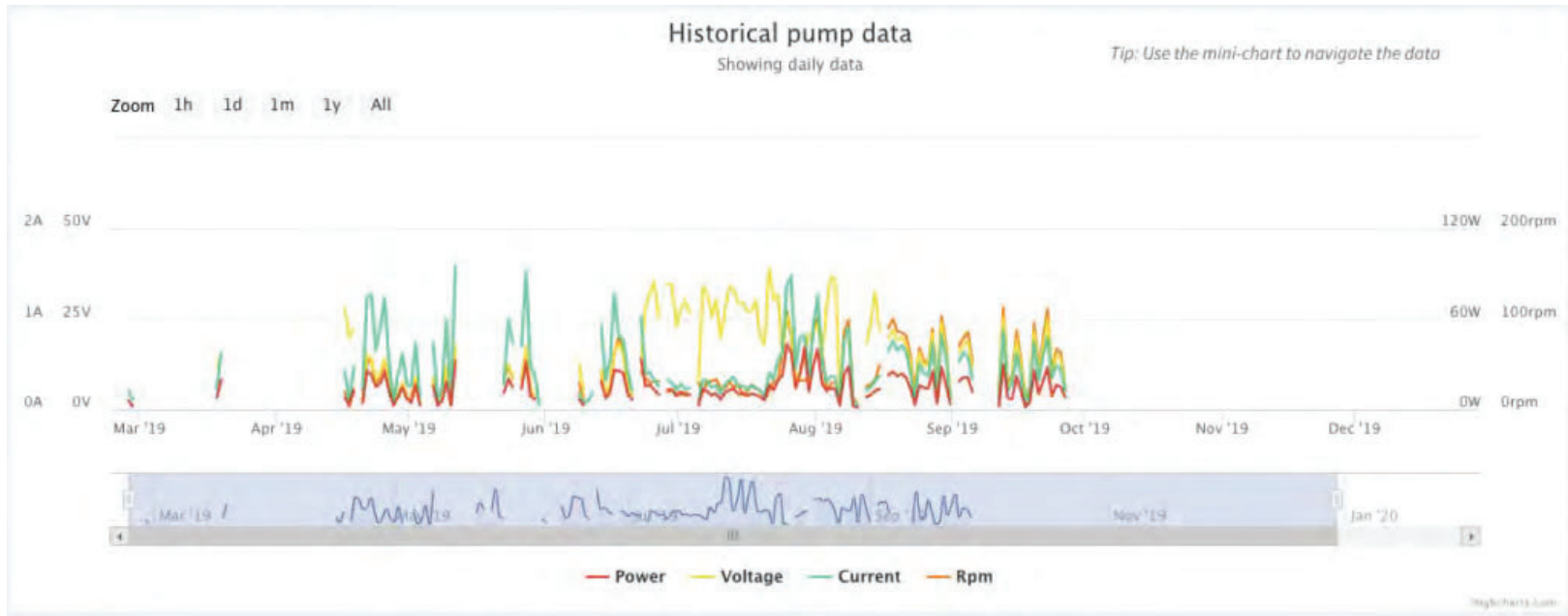
PANELS CAN GET
DIRTY



LINES CAN GET
DAMAGED

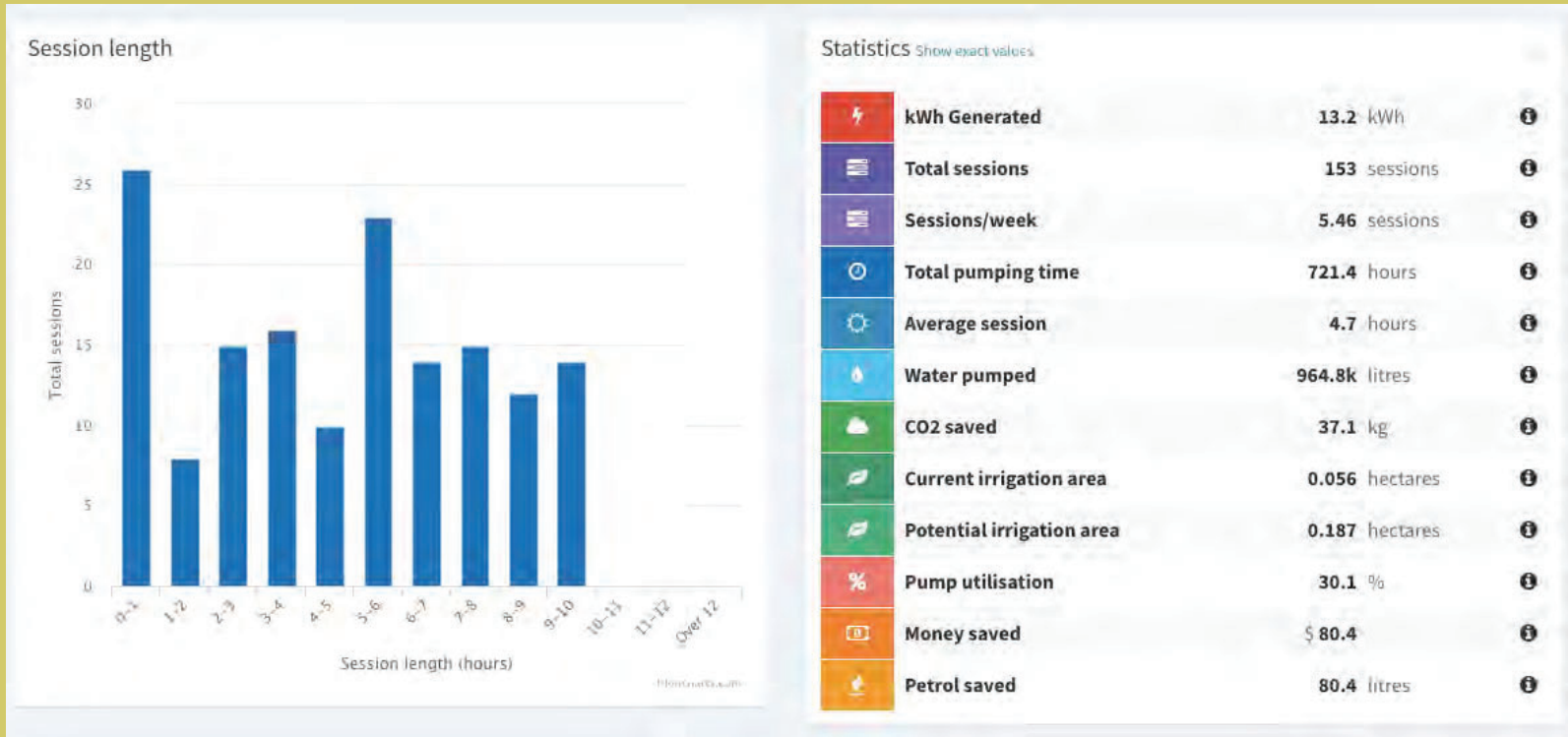
THIS IS WHY
WE HAVE
REMOTE
MONITORING
CAPABILITIES





REAL TIME PUMP DATA

INFORMATION WE
CAN LEARN ABOUT
THE SYSTEM



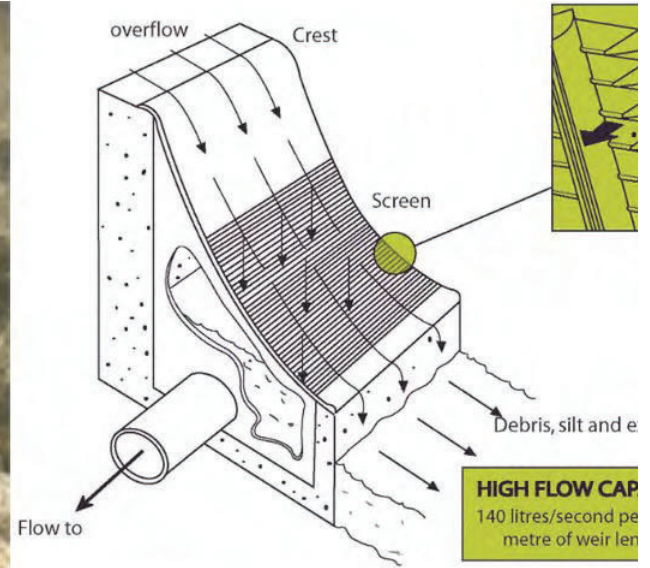
PUMP STATISTICS

SUCCESSFUL PROJECTS









CONTINUAL IMPROVEMENTS

WITH CONTINUOUS
CHALLENGES COMES
CONTINUOUS
INGENUITY



THANK YOU



QUESTIONS

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