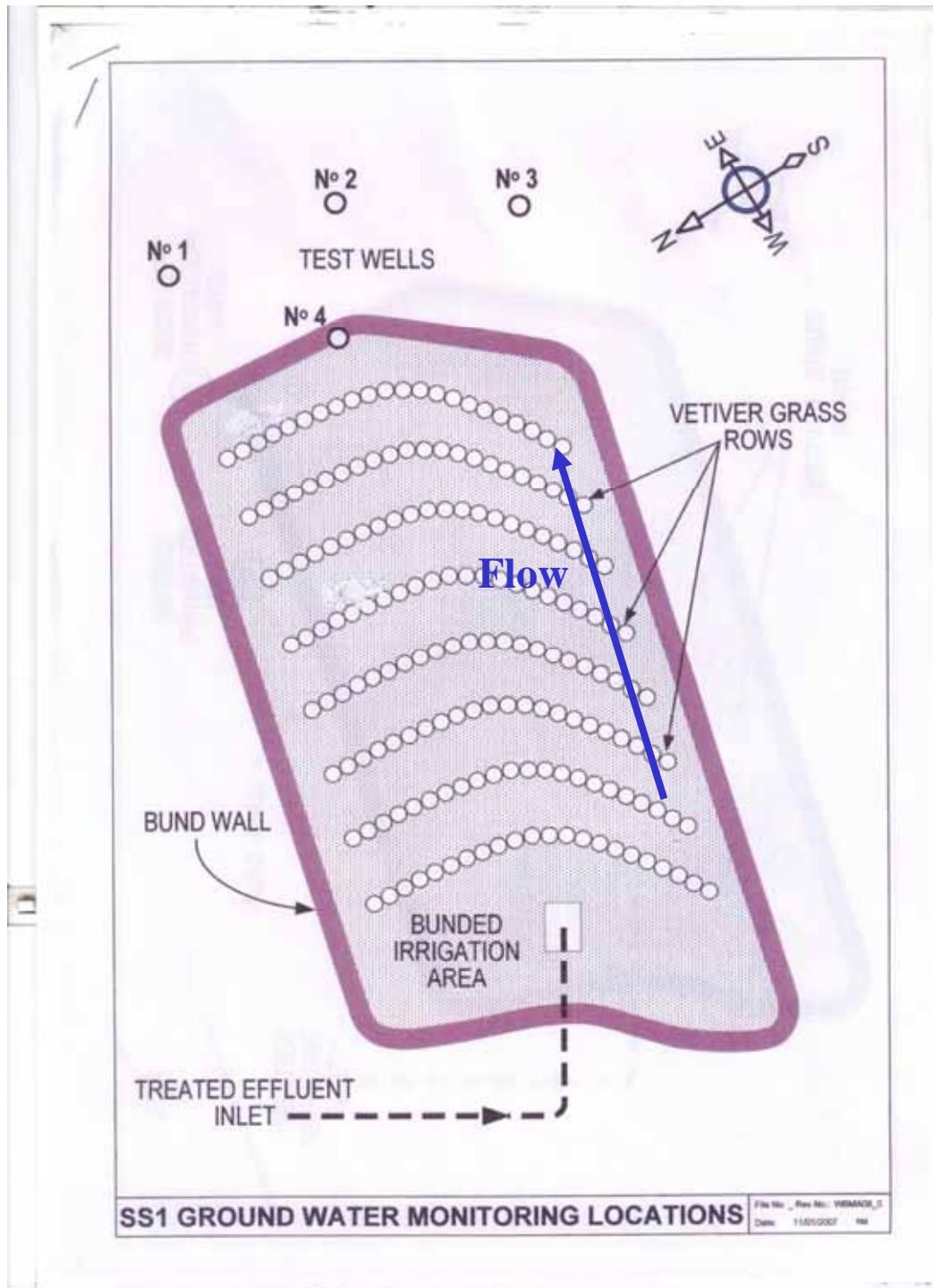


**EFFECTIVENESS OF THE VETIVER SYSTEM IN  
TREATING SEWAGE EFFLUENT**

*Vetiver was planted to dispose sewage effluent from a  
small recreational airfield in Queensland, Australia*

*Paul Truong*



## Planting Design

- 8 rows of vetiver
- 10m long each
- Inter-row spacing 1m
- Plant spacing 5 plants/ m
- Total plants 400
- Gravel trench 60cm deep
- Land area 100 sqm
- Bund wall W54 X H30cm

**First year:** The first few rows have excellent growth, but the last 2 rows are very poor due to lack of effluent

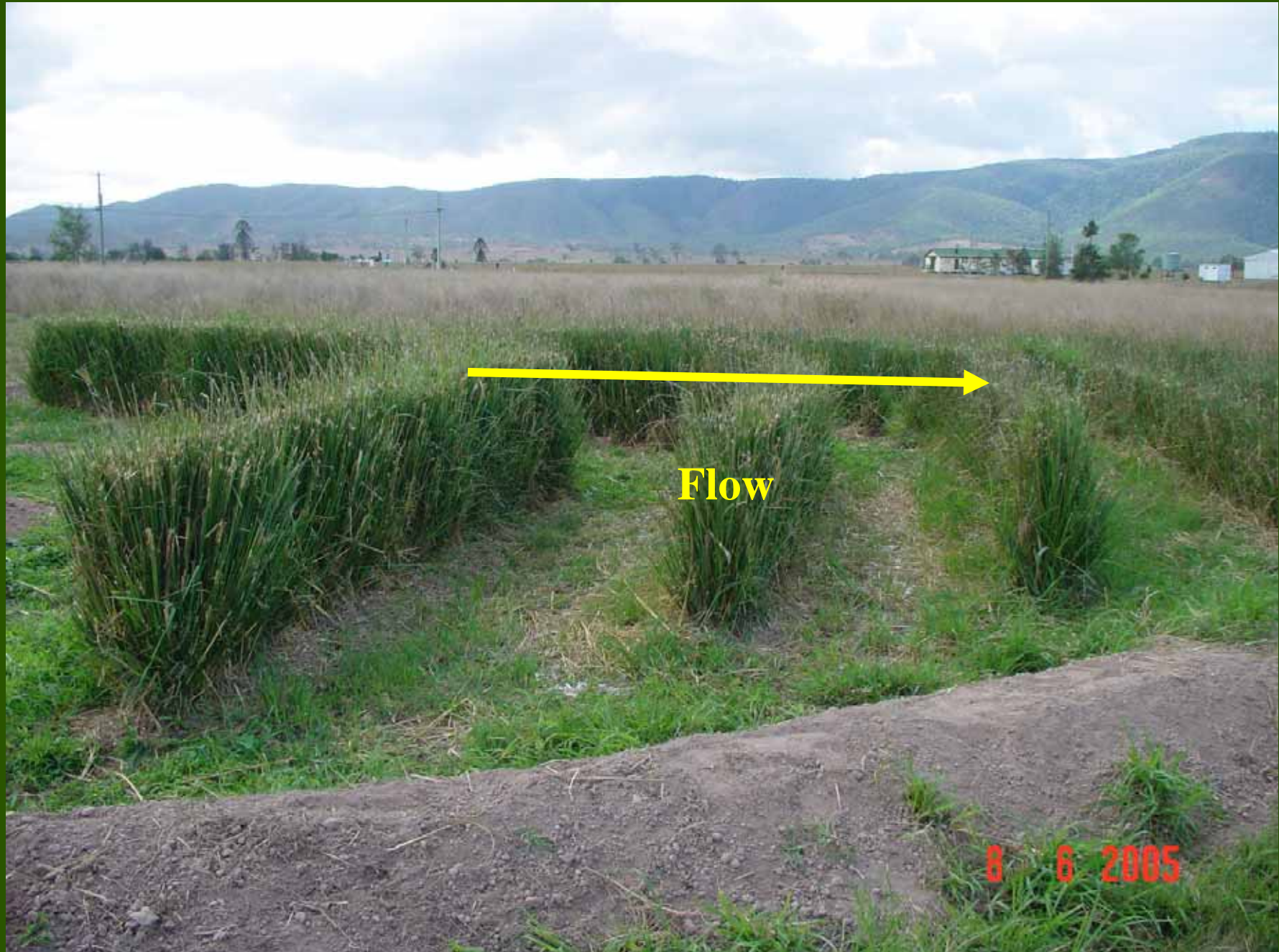


**Good growth**

**Poor growth**

8 6 2005

**The first few rows have excellent growth**



**The last few rows have very poor growth , due to lack of effluent**



**Third year: Excellent growth, exceeding 2m.**



# Cutting down to 50cm every 3 months





**Effluent  
inlet**

1 2 2008

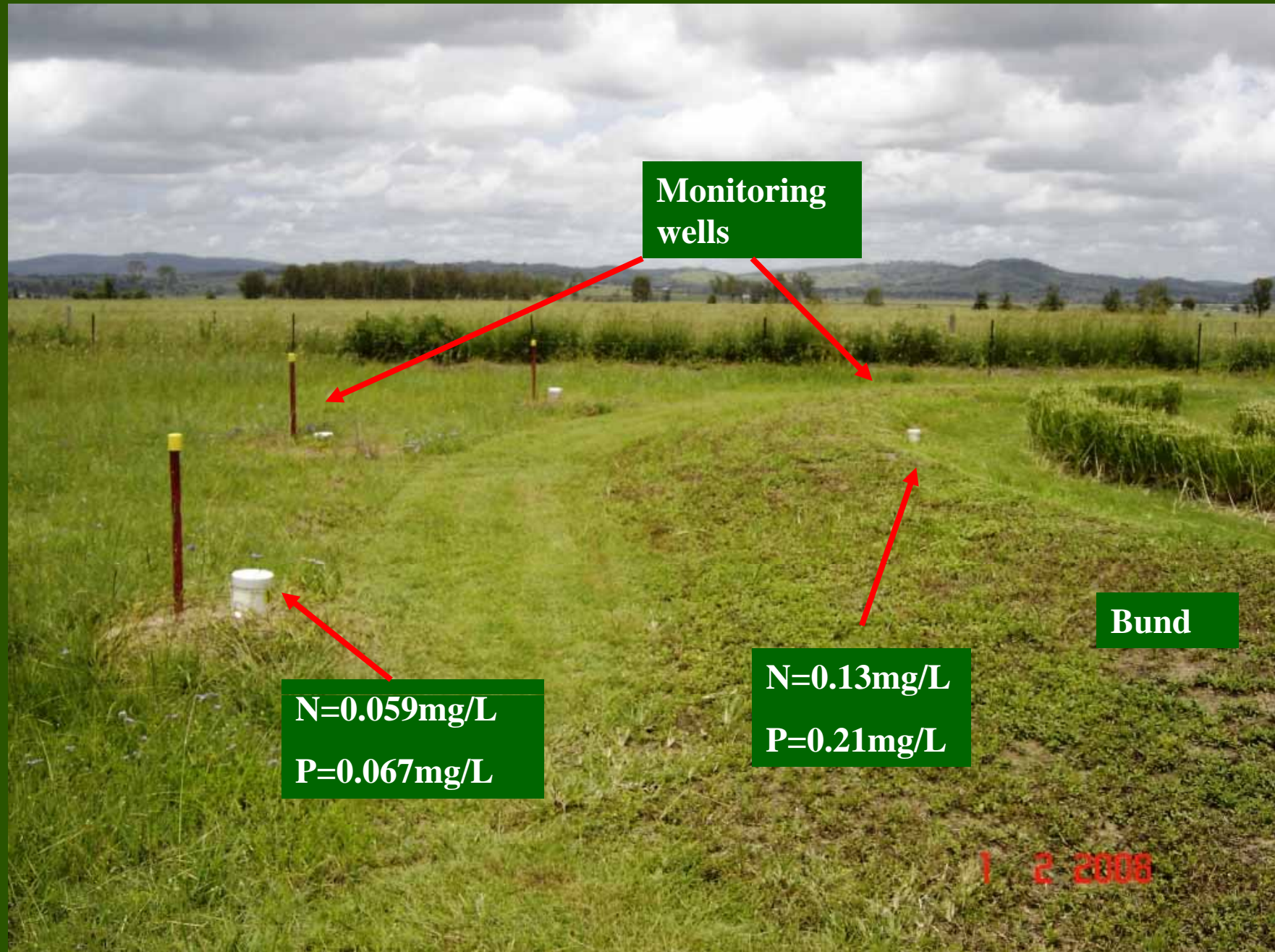




**Properly maintained, note no weed in or between hedges**



# Monitoring wells and nutrient levels



## Hay for mulch or fodder





Better growth

Poorer growth

## INPUT

Average daily flow: **1 670L**

Average total N: **68mg/L**

Average total P: **10.6mg/L**

Average Faecal Coliform: **>8 000**

## SUMMARY

### OUTPUT

Average daily flow: **Almost Nil\***

Average total N: **0.095mg/L**

Average total P: **0.138mg/L**

Average Faecal Coliform: **<10**

**\* Only flow after heavy rain**

# VETIVER

**This grass is being used as a low impact alternative to managing effluent.**

**The increased uptake rate of Vetiver reduces odours, leakages and contamination of the subsoil and water table.**

**Thank You**

1 2 2008