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# ITRC Recommendations:

## Summary

1. Bottom line – What % of applied N is removed by HARVESTED crop portion? (Applied/Removed = A/R)
2. Checklists of best management practices have very limited value.
3. Only limited, summarized data is needed in Sacramento
4. Before writing tickets, we need better information on:
  - N removed per ton of harvest (average, std. deviations)
  - Reasonable A/R values
5. Can plans/info from all sorts of programs be simplified and consolidated?

# ITRC Recommendations

1. Bottom line – What % of applied N is removed by HARVESTED crop portion ( $\text{Applied/Removed} = A/R$ )
  - Extensive monitoring, theory, “vulnerability zones”, etc. do not provide direct knowledge of bottom line.
  - It’s a simple concept – whatever is not removed via harvest:
    - Volatilizes
    - Leaches
    - Is stored (but using a 3-5 year average, this zeros out)

# ITRC Recommendations

## 2. Checklists of best management practices have very limited value.

- They sound good...but we have had these for years.
- Simple concept – makes people feel good. Something to check off. Minimal effort
- The only way a good A/R ratio is achieved is if good management practices are used. We don't need to know the details of how farmer "z" accomplishes it. And if the experts don't already know what works, they really aren't experts.

### 3. Only limited, summarized data is needed in Sacramento

- Let's keep our eye on the objective. It is NOT to have regulatory agency personnel know everything that might be interesting or useful in the future....or to create huge databases for researchers to mine for whatever.....
- The objective: Minimize, as much as is reasonable, the leaching of NO<sub>3</sub>, into groundwater.
- What is the minimum information needed to know if compliance is reasonable?

#### **4. Before writing tickets, we need better information on:**

- **N removed per ton of harvest (average, std. deviations)**
  - **Reasonable A/R values**
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- **This is a new way of looking at nitrogen and water management**
  - **Familiar teaching, research, and recommendations are based on plant UPTAKE, not REMOVAL FROM THE FIELD.**
  - **We don't even know what the range of values is for various crops. Classic "research" is NOT needed – we just need hundreds of measurements from commercial fields.**
  - **\*\*Because we don't know all the answers right now is NOT justification for adopting the A/R ratio. We just need TIME. This was very clear in the report.**

## **5. Can plans/info from all sorts of programs be simplified and consolidated?**

**We don't know all of the programs that need forms filled out. But it appears that for farmers, they seem excessive and often duplicate things.**

**The state agencies (not just the State and Regional Boards) should, as good public servants,**

- Eliminate duplication**
- Eliminate all “nice to know” data requirements**

**And no, the argument that it can't be dealt with right now is not a reasonable excuse. Public agencies must not create unbearable requirements.**