Ptd. Forest hrg. 8/16/77

A. Reed, Eugene, B.C., & written on ecs. of timber mgmt.

I own large house w. large driv. lumber.

Not forester. Poor philosopher, from time to time look at F.S. to see if make sense.

B. Am here at invn. of Cong. Weaver, extended indirectly. WTA pd., but I do not speak for them. I do speak for large no. of ecsts. Most ecsts. who look at F.S. preachment & practise are shocked, if not surprised, and feel that major changes in guiding doctrines are in order.

Why? To achieve goals:

- empl.
- best use of land & capl.
- meet cons. demands
- release surplus land & K for higher uses
- reduce high cost of growing wood
  K

C. Carrying costs.

a major fault is understating or ignoring cost of holding inv., & land. Results in excess inv.

Two aspects, interrelated. Old growth hgn.; & rotn. age when on 2d growth.

Cost of holding includes int.; rent; losses (fire, insect, blight, rot, theft); protn. costs — including externalities from spraying, and transpiration of water; ~~[illegible]~~ reduced game produ.; reduced access for recrn (bcs. roadless); & fire hazard to homes in some areas;

Here I conc. on just int. & rent.

1. Rotn. age.

Pass out handout.

a = sinking fund annuity, is best conceived as equivalent grazing fee. (PMT on hand calc.)
Put 1¢ per yr. into sinking fund for 50 yrs., get $100 at 8%.

This is just looking at int. carrying cost, and rent. Mkd. carry taxes, too, as other invts. have to.

This doesn't mean instability. Short rotns. ~~can be~~ are as stable as long, – in some ways more so, can get into them quicker.

Doesn't mean cheating future, but contrary. Charts best path into future, max's wealth.

Doesn't cheat empl. for wealth, but Δs empl. ~~High~~ More land cleared & regen. ea. yr.

I doubt if it cheats recrn. In east, & Eur., short rotns. & heavy recrn. use go together. I've hiked over old logging roads that gave me much more pleasure than stones in Olympic Nat. Pk.

More study needed. & ~~to~~ beyond scope.

F.S. doctrine here is $i = 0$.

Other fns. max DCF (or i.r.r.)

Ecsts. feel F.S. shd. do so.

This means reducing invg — not speaking of old growth, but ~~old~~ invg. of 2d growth.

$i = 0$ means:

Invg. free, so let it swell up

Apply K until last increment yields nothing.

2. Regen: how much & where.

C mai gives you no rule, how much to spend on regen.

Ec. rule also says ΔC_0 so long as that will $\Delta \underline{a}$, (a.k.a. Soil Rent)

F.S., lacking any criterion, spends money randomly. Is no evidence they are spending most productively.

Since they aren't thinking ecly, they don't even keep books in such a way you can audit, so we have to rely on "evidence". Clemson, a little of everything, everywhere.

We do know they use ACE.

∧ Under ACE, quality of site doesn't affect payoff.

In terms of W-u. Ore., ec. allocn. wd. call for much higher forms of Mgmt. effort here.

3. Old Growth Ligr.

Mush too slow, bcs.

a. Hangfire

i. Based on slow future rotn., as above.

ii. " " normalizn. at end of 120 years or so, a false god to worship (more later)

iii. No allowance for techn. advance to speed future rotn.

iv. No allowance for waste of timb & FF in uncut old growth.

Value of time treated as 0.

b. Post-Hanzlik. E.E. in perp.
Even worse, takes more than one rotn. to liq. old growth.
c. ACE may speed up, but ~~per~~ capriciously.

Advantages of speeding cut:

a. Put wood to use. Meet consumer needs.
Instead of rotting in forest, ← Housing, non-consumptive over long pds.
sheltering people, & b. Release K -- i.e. get money from sales.
releasing land. c. Release land to grow wood (Engelbert!)
d. Δ jobs
e. Reduce insect. losses
f. " " costs: fire protn. pest control
g. Δ habitat
h. Reduce water loss
i. Reduce & defer pressure on virgin lands w.
long hauls & non-renewability problems.
j. Advance prosperity of dependent communities —
a value greater than hypothetical stability after 100 years.
Advance their diversification, like Wis.
& Vt. Release from monoculture trap.

k. In inarmed. future, meet gap in other supply.

20 yrs. ago, F.S. said they were saving timber for this famine. Now, it's here, they shd. deliver — and instead they are reducing cut.

l. Speeds applicn. of genetic advances.

Why E.F. shd. not be sole guide to timber mgmt.

a. Demand is uneven

b. Alt. supply available abroad

c. There are several classes of owners. E.F. for one does not coord. w. the others. (Mkt. mag.)

d. Cost is extremely hi, as above.

e. Assumes away future techn. advances that wd. ↓ future mai. Is based on speculation.

f. Is nebulous in defn. Volume of wood depends on mgmt. standards. What kind of wood will be valued 100 years from now? How faster will they start?

g. Empl. turnover in logging is very hi.

h. Stasis is decadence and probably a trap anyway. The world is dynamic.

Ideas, forest mgmt.

1. Begin w. all outputs
   If non-timber is undermeasured, fault is F.S.

2. ΔP justifies larger invy., just like lower i.
   Faustman, however, reduces sensitivity to this factor. This is one of its virtues.

3 Need greater emph. on prompt restocking, mitig labor (note Fed. recoupment of payroll taxes)

4. 2d virtue of Fmn. is: put Co on good land.

5. Clear-cut vs. other harvest methods; not my main topic.

6. Cong. gave F.S. long leash until 70s. So did courts. F.S. reacted predictably. Self-aggrandizement.
   a. Criteria ignore costs.
   b. Hoard K -- doesn't appear in budget. Also land (which generates K by growth.)

7. NFMA, '76, deals w. lesser ea. issues.
   Ferment of '70s has brought certain perceived issues to the top, which are less important.
   Clear-cut; sealed-bidding.

To extent it deals w. larger issues, deals poorly.
a. Limits use of thinning. This shd. be mand.

b. Strengthens non-declij e.f.

8. Why cut old growth.
a. Release land to grow again. on other use.
b. " K to productive use — maybe in forestry, regen. bare land.
c. Reduce losses of inv., & cost of guarding it.
d. Probly manage land better for game & water.
e. Advance revs.
f. " service to consumers, in bldgs.
g. Reduce pressure to invade subsurf. lands: steep erosive, long-haul, non-renewable.
h. A useful emplmt.

a. Re a, note, the more you cut, the more you can justify cutting; and if you never cut any, you cd. never justify cutting any.

9. Ecstr. see need to reduce inv.

F.S. doctrine of A.C. ≦ growth doesn't allow this. (except that new stems add wood slowly, & A.C. may use m.a.i. calc.)

A.C.E. is not the enemy, save as a confusion. ~~Entsum~~ Replanting is probly a good idea. It beats natural regen.

The enemy is idea of const. inv.

10 Re e.f.

a. Demand is inelas

b. Alt. supply & demand are available from abroad.

Ideas

11. – Sterile land.
" K
twin results of present policy, re old growth.

12. – heavy rain reduces recrn. value. Coast Range ↓, great for timber, not for recrn. Cascades are a better alt. nearby. & pop. is low.

13. – real price of timber rising, 1946 – ca. 2%/yr. Add to growth curve. But also add to S value.

14 – hi S value calls for hi C_o -- backing. F.S. blames budget. But cd. reallocate.

15 – New demand for Δ hsg. forecast, bulge in 30-40 age group coming. 20 yrs. ago, T.R.R. etc., F.S. defended slow cut bcs. was saving to meet bulge. Now it's here, they are revising drop-off interp. of policy to reduce cut even more. Pvt. harvests ~~down~~ forecast down, demand forecast up. F.S. trapped in rigid ideology that forces them to ignore these factors – and others: K shortage; unempl.

16. – Non-declining e.f. says harvest must never decline.

Can Δ harvest for 40 yrs., w/o reducing future harvest, by reducing inv. or ex. schedule. Is folly not to do so.

17. – Moral of fires. Hoarding & lockup of K & land are costly. Store not up treasures on earth, ...

→ Generally, cost of carrying inv. understated by f.s. : int., rent, losses, costs of protn.

2d moral: Δ cut. Like inst. urban renewal, here is inst. forest renewal.

18 – Thrifty, open young stands are not unattractive. The planting process itself is interesting -- e.g. Monk plantation in Vt.; pine plantations in Kettle Moraine in Wis.

The idea that harvesting is inherently hostile to the env. is primitive, a relic. In the east, & more in Eur., there is a harmonious lumber indy. based on continual rotn. Step 1 is harvest old growth,

19 — When remove o.g. Very hi vol/acre, flow bound to decline later. But hist'g. o.g. is not a flow.

20 A.) — Orig. Hanzlik let you remove o.g. over yrs. ~~New interp. regs~~ But then there wd. be a drop-off. New interpn. doesn't allow the drop-off. So remove over larger no. of yrs.

B.) Even more effect (in BLM) was had by a new inventory that reduced commercial land base — they removed land that was hard to regenerate.

21 1970, BLM issued A.C. 1970-79
Reduced by 10%.

22 E.F. by agency is uneven for region, if other lands are uneven. Ore. Gov. pointed this out.
The mbst. coords. plans better.

23 F.S. & BLM Translate & interpret
Cong. language.

24 — Duerr Rpt.: late '50s, showed F.S. ~~showed~~ ~~F.S.~~. cd. Δ cut for 50 yrs. at small later loss.

25 — '73, F.S. new reduced A.C. policy, post-Hanzlik.

Nat. F. Mgmt. Act, '76, put this into law. But USDA Secy. can disregard. And language is ambiguous.

26 Big Talking pt. is need to prevent abrupt drop-off.

27 '73, Pres.'s Panel (Clawson et al.) criticized low cut; also criticized low level of invt.

28 Note that future s.y. depends much on C_0 etc. applied then. Also on genetic advances; utilizn advances; etc. Is an elastic figure, can be anything you want to make it.
Could also be $ or bd ft or cu ft.

29 '76 NFMA provides for higher invt. levels. But says rotn. shall be cmai. (Of what? "physical," says Nelson & Pay. This still is elastic)

30 Coordn. of harvests among owner classes — more likely to be achieved by mbrt. than by ~~si~~ embedding separate agencies.

31 — N. & Pay. say ec. rotn. on O&C is 50 yrs., vs. 85 yrs cmai.

32 — Visitor-days is no measure, bc. not paid for.

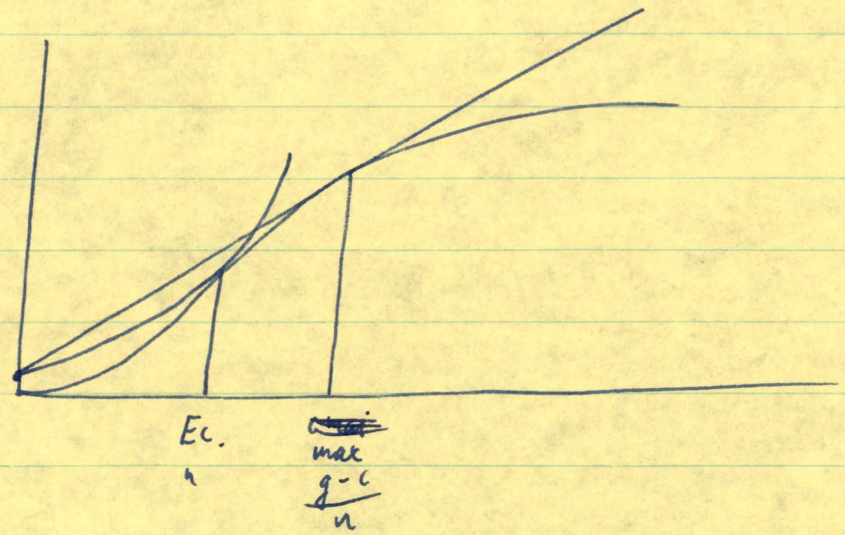
Re running out.

The lumber we put in bldgs. today is not lost. It lasts 100 yrs. or so.

So we do not destroy supply when we cut. We rather:

- shift wood from growing (if it is) to serving needs
- release land for new growth.

The demand for housing we meet today needn't be met tomorrow.



1. Max $\frac{g-c}{n} \cong$ max $\frac{g}{n}$, bcs. c very small cfd. to g.

2. Max $\frac{(g - Ce^{in})\, i}{e^{in} - 1}$ Give numerical table showing $a \to \frac{g-c}{n}$ as $i \to 0$

Some elements of forest mgmt.

~~2. Max. a fcn. like.~~
~~- like any bus.~~
~~- like B-C anal.~~

1. Define ~~How~~ objectives (see Walter)
   Wood supply
   Recn., watshed., scenic, wildlife, grazing

2. Measure objectives.
   Trade-offs. F.S. hasn't done this. Their method doesn't allow it. They overvalue wood v. other things by failing to discount.

3. Achieve objectives w/o waste -- cost out objectives.
   No mgmt. outlay not yielding cost or more.
   Max fcn. like
   " B-C

4 Measure costs
   Include land
   " capl. F.S. treats as free. 40% mortgage

Boils down to max DCF. (FS max's undisc. c.f.)

5. Plan ahead.

Forecast demand. But disint. outside agency, non-promotional needed

In this case, note intertemp. dependence of demand

– supply today reduces demand tomorrow.

Schedule supply, subject to:

- hold down c.c.
- K constraint
- use good land fast, bad land slow or never.

Hold down roads. Don't apply one rotn. over >2 site classes.

- other s & d, view entire system.

Aug. 16 — Ar BPA, Lloyd Center, near airport Sheraton Hotel.

Forest Subcomm.

James Weaver, pro non-decl; e.f.

Robt Duncan, from e. side of Ftd., will advise Ullman.

Puts words in mouth

Famine imminent due to overcutting

LeMasters, Hendee } he thinks I'm on authority ecsts.

Weaver vs. Ga. Pac. & fast cutting.

ACE comes from e.f. constraints

New Clawson 45-page amend.

Rotn. in Cal, 140-160 yrs. are most typical

Cuts are shrinking,

non-decl. e.f. replacing Hanzlik, slows down even more.

We went from fall-down to e.f. (?)

→ Explain to Weaver how fourth shd. be managed. How to use int. & show emai is O-int.

Avoid quoting others.

Weaver is vs. exports.
Undeveloped lands in N7 just bus. of bad report.

New study by Dow Flora, divert $ from new area roads to reforming old roads.
"Roads are built by timber purchasers." Craig.