

Backlog Aging Worksheet

Total backlog is a lie. The real backlog is what you have after the aged, duplicate, and stale items have been removed. This worksheet gets you from the lie to the truth.

Companion to: *Fix the System*, Chapter 17. **Who uses it:** the planner, reliability engineer, and maintenance supervisor.

When: once in week 1 of the install. Re-run monthly as a health check. **Why this exists:** plants measure total ready-weeks and stop there. Total ready-weeks tells you how much work has been entered. It does not tell you how much of it is actionable. A plant with 18 weeks of backlog and 40% of it aged beyond 90 days has 18 weeks of noise and 10 weeks of actionable work, and it cannot plan intelligently until it knows which is which.

Step 1 — Export every open work order

From the CMMS, pull every WO currently in the open / planned / waiting status. For each, record:

- WO number
- Asset tag
- Asset criticality (A / B / C from Chapter 15)
- WO type (PM / corrective / project / RCA action / inspection / other)
- Date entered
- Date last touched (status change, note added)
- Estimated labor hours
- Assigned technician (if assigned)
- Parts status (ready / waiting / unknown)
- Current priority

Total open WOs: _____ **Total estimated labor hours:** _____ **Weekly available maintenance labor hours:** _____
Total ready-weeks = total hours / weekly hours = _____

Step 2 — Bucket by age

Group every WO by days since "date entered."

Aging bucket	WO count	Estimated hours	Ready-weeks	% of total
Current (0-30 days)				
30-60 days				
60-90 days				
90-180 days				
180+ days				

Total				100%
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Aged backlog (>90 days) = _____ ready-weeks = _____ % of total

Action threshold: if the aged backlog is >15% of total, you have an aging problem regardless of the absolute ready-weeks number. The aged portion gets the triage first.

Step 3 — Criticality cut on the aged portion

For the 90-180 day and 180+ day buckets combined, break down by criticality:

Criticality	Aged WO count	Aged hours
A		
B		
C		

A-class work that has been sitting for 90+ days gets priority in the triage. It is either: (1) being blocked by something that needs escalation, or (2) was never actually A-class and got mis-classified.

Step 4 — Run the four-lever triage (next step is the Decision Tree worksheet)

Every aged WO must be dispositioned via one of four levers before re-entering the active queue:

- **KEEP** — still valid, still needed, proceeds to scheduling inside 4 weeks
- **KILL** — no longer needed; log the reason (duplicate / superseded / condition resolved / asset out of service / other)
- **DEFER** — valid but not a current priority; assign a re-review date (30 / 60 / 90 days out)
- **ESCALATE** — critical and blocked; route to the plant manager same day

Use the *Work Reclassification Decision Tree* (ch17-dt-work-reclassification-decision-tree.md) to walk each aged WO through the four levers.

Step 5 — Record the triage result

After the triage, refill the aging table with only the KEEP items:

Aging bucket	KEPT WO count	Kept hours	Ready-weeks	% of total
Current				

30-60				
60-90				
90-180				
180+				
Total				100%

Actionable backlog after triage: _____ **ready-weeks**

Triage statistics (all aged items, not just kept):

- KEPT: _____ items / _____ hours / _____ % of aged
- KILLED: _____ items / _____ hours / _____ % of aged
- DEFERRED: _____ items / _____ hours / _____ % of aged
- ESCALATED: _____ items / _____ hours / _____ % of aged

Healthy triage: typically 20-40% of the aged portion is KILLED, 20-30% DEFERRED, 10-20% ESCALATED, 20-40% KEPT.

Step 6 — Capacity decision

Compare the post-triage actionable backlog to the target 2-4 ready-week band.

Post-triage ready-weeks	Diagnosis	Action
<2	Discovery gap	Audit the identification process (Chapter 5)
2-4	Healthy	Install weekly triage meeting, move to Day 60
4-6	Mild capacity gap	Rebalance labor first (Day 14-21 lever 1)
6-10	Capacity gap	Rebalance + contract (levers 1 and 2)
>10	Structural capacity gap	Full Day 14-21 decision: rebalance + contract + hire

Step 7 — Sign-off

Role	Name	Signature	Date

Planner			
Reliability engineer			
Maintenance supervisor			
Plant manager (if capacity decision taken)			

What to avoid

- **Measuring total ready-weeks only.** The aging breakdown is the data that matters.
- **Skipping Step 5's triage statistics.** The KILL rate is the most diagnostic number in the worksheet. If it is <10%, the triage was not disciplined.
- **Running the triage annually.** Aged backlog regrows in 90 days. Monthly is the floor. Weekly for the aged portion.
- **Treating KILL as admission of failure.** It is admission of changed conditions. Log the reasons; the pattern teaches the identification process what to refine.
- **Taking the capacity decision before the triage.** You cannot decide whether to hire until you know how much of the 18 weeks is real.

End of worksheet. File with the weekly backlog review packet. Re-run monthly.