Community Watchers - Visual Guide
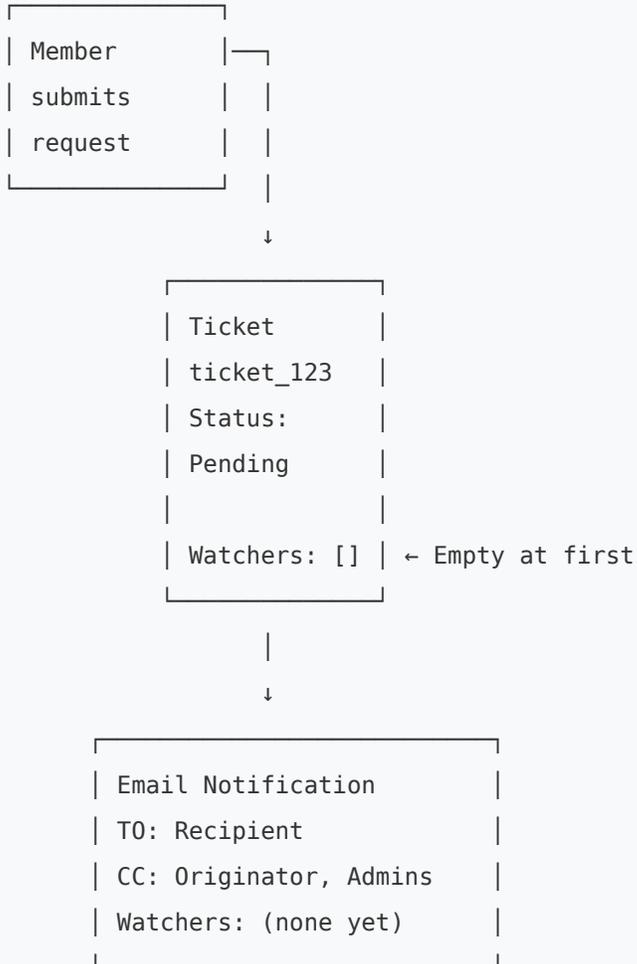
Community Watchers - Visual Guide

A visual walkthrough of the watchers feature
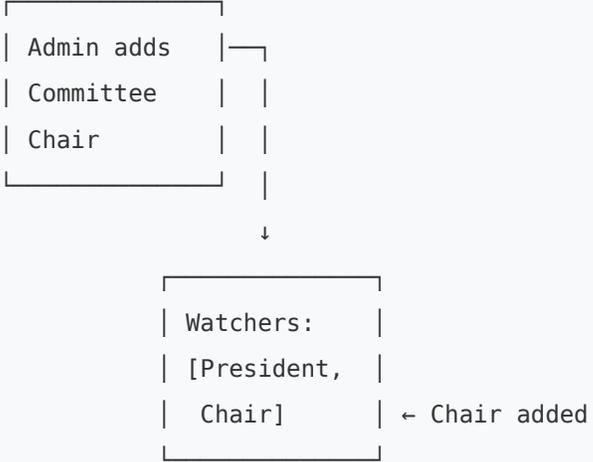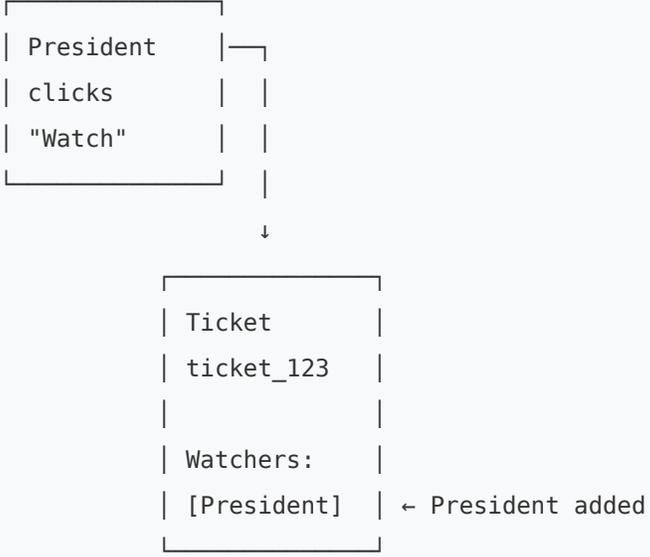
How Watchers Work - Flow Diagram

```
 ┌─────────────────────────────────────────────┐
 |                 TICKET LIFECYCLE             |
 └─────────────────────────────────────────────┘


1. TICKET CREATED
   ┌───────────────┐
   | Member        |─┐
   | submits       | |
   | request       | |
   └───────────────┘ |
                     |
            ↓
           ┌───────────────┐
           | Ticket        |
           | ticket_123    |
           | Status:       |
           | Pending       |
           |               |
           | Watchers: [] | ← Empty at first
           └───────────────┘
                 |
                 ↓
        ┌───────────────────────────┐
        | Email Notification        |
        | TO: Recipient             |
        | CC: Originator, Admins     |
        | Watchers: (none yet)       |
        └───────────────────────────┘
```

2. WATCHERS ADDED

```
┌─────────────┐
│ President   │──┐
│ clicks      │  │
│ "Watch"     │  │
└─────────────┘  │
                 │
        ↓

        ┌───────────────┐
        │ Ticket        │
        │ ticket_123    │
        │               │
        │ Watchers:     │
        │ [President]   │ ← President added
        └───────────────┘


┌─────────────┐
│ Admin adds  │──┐
│ Committee   │  │
│ Chair       │  │
└─────────────┘  │
                 │
        ↓

        ┌───────────────┐
        │ Watchers:     │
        │ [President,   │
        │   Chair]      │ ← Chair added
        └───────────────┘
```

3. RESPONSE ADDED

```
┌─────────────┐
│ Recipient   │──┐
│ responds    │  │
└─────────────┘  │
                 │
        ↓

      ┌────────────────────────┐
      │ Email Notification     │
      │ TO: Member (originator)│
      │ CC: Recipient,         │
      │     President (watcher),│ ← Watchers get email!
      │     Chair (watcher)    │
      └────────────────────────┘
                 │
        ↓
```

```
┌─────────────────────────┐
│ Everyone receives:      │
│ • Response message      │
│ • Ticket update         │
│ • Action buttons        │
│ • Watcher notice footer │
└─────────────────────────┘
```

4. PRESIDENT UNWATCHES

```
┌───────────────┐
│ President     │──┐
│ clicks        │  │
│ "Unwatch"     │  │
└───────────────┘  │
                   │
              ↓
        ┌─────────────┐
        │ Watchers:   │
        │ [Chair]     │ ← President removed
        └─────────────┘
```

5. TICKET FULFILLED

```
┌───────────────┐
│ Recipient     │──┐
│ marks done    │  │
└───────────────┘  │
                   │
              ↓
        ┌─────────────────────────┐
        │ Email Notification      │
        │ TO: Member (originator) │
        │ CC: Recipient,          │
        │     Chair (watcher)     │ ← Only Chair now
        └─────────────────────────┘
```

        President doesn't get this email (unwatched)

6. TICKET RESOLVED

```
┌───────────────┐
│ Member        │──┐
│ confirms      │  │
│ resolved      │  │
└───────────────┘  │
                   │
              ↓
```

```
┌─────────────────────────┐
│ Final Email             │
│ TO: Recipient           │
│ CC: Member,             │
│     Chair (watcher)     │
└─────────────────────────┘


         Ticket closed
         Chair can unwatch
```

Watchers Section UI Layout

```
╔═══════════════════════════════════════════╗
║              TICKET DETAILS               ║
║  Ticket ID: ticket_abc123                 ║
║  Status: Pending Response                 ║
║  Subject: Request for Financial Records   ║
╚═══════════════════════════════════════════╝


╔═══════════════════════════════════════════╗
║              MESSAGE THREAD               ║
║  [Messages displayed here...]             ║
╚═══════════════════════════════════════════╝


┌───────────────────────────────────────────┐
│  🔔 TICKET WATCHERS                       │
│  Watchers receive notifications on all ticket updates.  │
│                                           │
│  Current Watchers:                        │
│  ┌─────────────────────────────────┐     │
│  │ 👤 Alice Smith (alice@pmtnm.org)     [Remove] │     │
│  │ 👤 Bob Jones (bob@pmtnm.org)         [Remove] │     │
│  │ 👤 Carol White (carol@pmtnm.org)     [Remove] │     │
│  └─────────────────────────────────┘     │
│                                           │
│  ┌─────────────────────────────┐         │
│  │ [👁 Watch This Ticket]       │ ← If not watching │
│  │  Get notified of all updates │         │
│  └─────────────────────────────┘         │
│                                           │
│  OR                                       │
```

```
|                                                              |             |
| ┌──────────────────────────────────────┐                    |             |
| │   [✓ Watching - Click to Unwatch]    │   ← If watching    |             |
| └──────────────────────────────────────┘                    |             |
|                                                              |             |
| ──────────────────────────────────────────────             |             |
|                                                              |             |
| ADD WATCHER                                                  |             |
| ┌────────────────────────────────────────────┐             |             |
| │ Email Address *                            │             |             |
| │ [_____]        │             |             |
| │                                            │             |             |
| │ Name (optional)                           │             |             |
| │ [_____]        │             |             |
| │                                            │             |             |
| │ [Add Watcher]                             │             |             |
| └────────────────────────────────────────────┘             |             |
|                                                              |             |
```

Email Notification with Watchers

```
┌────────────────────────────────────────────────────────┐
│ From: PMTNM Workflow System <workflow-manager@pmtnm.org> │
│ To: member@example.com                                  │
│ CC: recipient@pmtnm.org, watcher1@pmtnm.org,            │
│     watcher2@pmtnm.org, workflow-manager@pmtnm.org      │
│ Subject: [Workflow Ticket #abc123] Response: Request    │
└────────────────────────────────────────────────────────┘


┌────────────────────────────────────────────────────────┐
│                                                          │
│  New Workflow Request                                    │
│                                                          │
│  Ticket ID: ticket_abc123                                │
│  Workflow Type: Financial Records Access Request         │
│  Requested By: Jane Member (member@example.com)          │
│                                                          │
│  [Email content here...]                                 │
│                                                          │
│  ┌──────────────────────────────────────┐               │
│  │ Take Action:                         │               │
```

```
|   |                                                        |        |
|   | [✓ I have fulfilled this request]        |        |
|   | [☐ Respond with Message]                 |        |
|   |_____|        |
|   |                                                        |        |
|   _____              |
|   |                                                        |        |
|   | ☐☐ Watching this ticket?                  | ← Watcher Notice|
|   |                                                        |        |
|   | You're receiving this because you're     |        |
|   | watching ticket updates.                 |        |
|   |                                                        |        |
|   | Visit My Requests to manage your         |        |
|   | subscriptions.                           |        |
|   |_____|        |
|   |                                                        |        |
|   This is an automated message from PMTNM Workflow System  |
|_____|
```

Admin Dashboard View

```
_____
|                                                        |
|   WORKFLOW ADMIN DASHBOARD                        |
|                                                        |
|   [Filter: All] [Search: _____] [Sort: Newest First]  |
|_____|


_____
|                                                        |
|   Financial Records Access Request         [Pending Response]|
|   ──────────────────────────────────────────────          |
|   Ticket ID: ticket_abc123                        |
|   From: Jane Member → To: secretary-treasurer@pmtnm.org   |
|   Created: Jan 9, 2025 | Age: 0 days              |
|                                                        |
|   Progress: ▐█░░░░  33%                           |
|                                                        |
|   Timeline:                                       |
|   ✓ Created: Jan 9, 2025 9:00 AM                  |
|   ☐ Pending Fulfillment (Deadline: Jan 23, 2025)  |
|   ☐ Not Resolved                                  |
|                                                        |
|   Messages: 1 | Deadline: 14 days                 |
```

```
|                                              |
|   ┌──────────────────────────────────────┐  |
|   | 🔲🔲 Watchers (3):                  |  |
|   | President, Audit Chair, Vice President  |  |
|   └──────────────────────────────────────┘  |
└──────────────────────────────────────────────┘
```

Permission Matrix

Action	Originator	Recipient	Admin	Watcher
View ticket	▢	▢	▢	▢
Watch ticket	▢	▢	▢	▢
Unwatch (self)	▢	▢	▢	▢
Add watcher	▢	▢	▢	▢
Remove watcher	▢	▢	▢	▢
See watcher list	▢	▢	▢	▢
Respond	▢	▢	▢	▢
Mark fulfilled	▢	▢	▢	▢
Mark resolved	▢	▢	▢	▢

Legend:

▢ = Can perform action

▢ = Cannot perform action

State Diagram: Watching a Ticket

```
              ┌─────────────┐
              |    NOT      |
              |  WATCHING   |
              └─────────────┘
                     |
              Click  |
          "Watch This |
            Ticket"  |
                     ↓
              ┌─────────────┐
```

```
          |  WATCHING  |
          |           |
  ┌───────→|  Receives |←───────┐
  |        |    all    |        |
  |        |  updates  |        |
  |        └─────┐ ┌───┘        |
  |              | |            |
  |              | |            |
Someone adds   Click |       Email |
you as watcher "Unwatch"|    notifications
  |              |              continue
  |              ↓              |
  |        ┌─────┐ ┌───┐        |
  └────────|  NOT  |───┘        
           | WATCHING |
           └─────┘
```
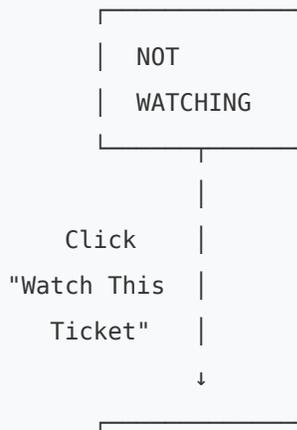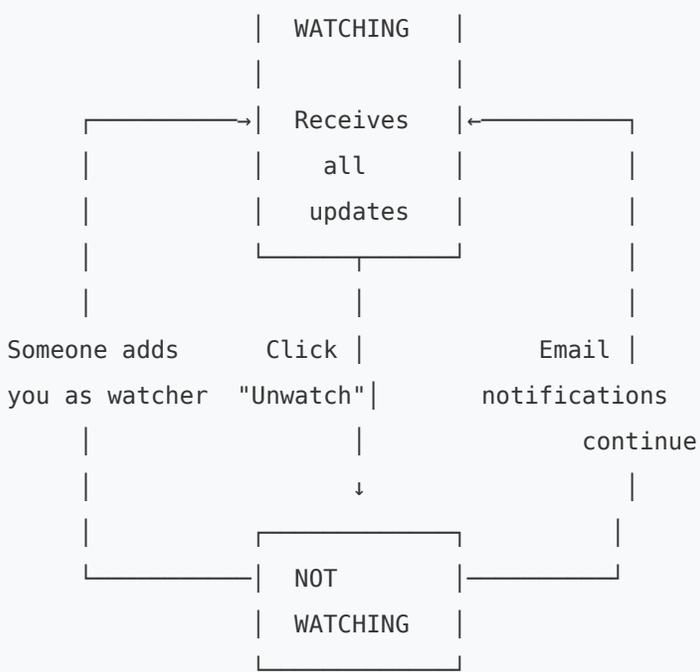
Watcher Notification Flow

```
┌──────────────────────────────────────────────┐
│  EVENT: Response Added to Ticket              │
└──────────────────────────────────────────────┘

                      ↓

        ┌──────────────────────────────┐
        │  WorkflowRouter              │
        │  sendTicketNotification()    │
        └──────────────────────────────┘

                      ↓

        ┌──────────────────────────────┐
        │  Get watchers from ticket    │
        │  watchers = [Alice, Bob, Carol]│
        └──────────────────────────────┘

                      ↓

        ┌──────────────────────────────┐
        │  Extract watcher emails:     │
        │  [alice@, bob@, carol@]      │
        └──────────────────────────────┘

                      ↓

        ┌──────────────────────────────┐
        │  Merge with CC list:         │
        │  CC = [originator, recipient,│
        │        alice@, bob@, carol@] │
```

```
        └────────────────────────────┘

                    ↓

        ┌────────────────────────────┐
        │  Generate email with       │
        │  watcher notice footer      │
        └────────────────────────────┘

                    ↓

        ┌────────────────────────────┐
        │  Send email to all recipients  │
        │  (or log in localhost mode)    │
        └────────────────────────────┘

                    ↓

              ┌──────────────┐
              │ ✉ Alice      │
              │ ✉ Bob        │
              │ ✉ Carol      │  ← All watchers receive
              │ ✉ Originator │
              │ ✉ Recipient  │
              └──────────────┘
```
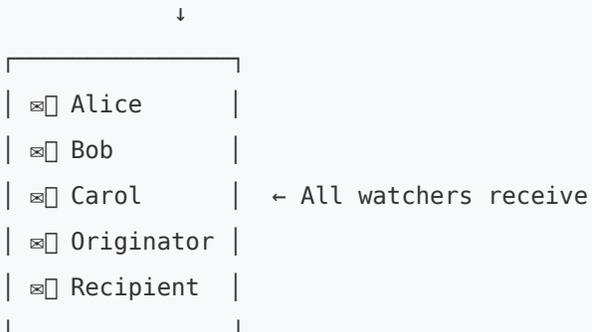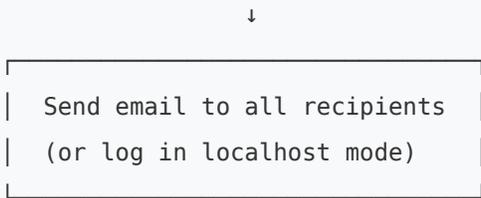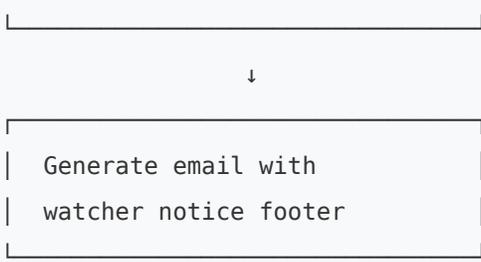
Watcher Data Structure

```
ticket_abc123
├── ticket_id: "ticket_abc123"
├── workflow_type: "membership_request"
├── status: "pending_response"
├── originator: {...}
├── recipient: {...}
├── thread: [...]
└── watchers: [
      {
        email: "alice@pmtnm.org",          ← Normalized (lowercase)
        name: "Alice Smith",                ← Display name
        added_at: "2025-01-09T09:00:00Z",  ← When added
        added_by: "admin@pmtnm.org",        ← Who added them
        unsubscribe_token: "abc123xyz..."  ← For unsubscribing
      },
      {
        email: "bob@pmtnm.org",
        name: "Bob Jones",
        added_at: "2025-01-09T09:15:00Z",
```

```
      added_by: "alice@pmtnm.org",
      unsubscribe_token: "def456uvw..."
    }
  ]
```
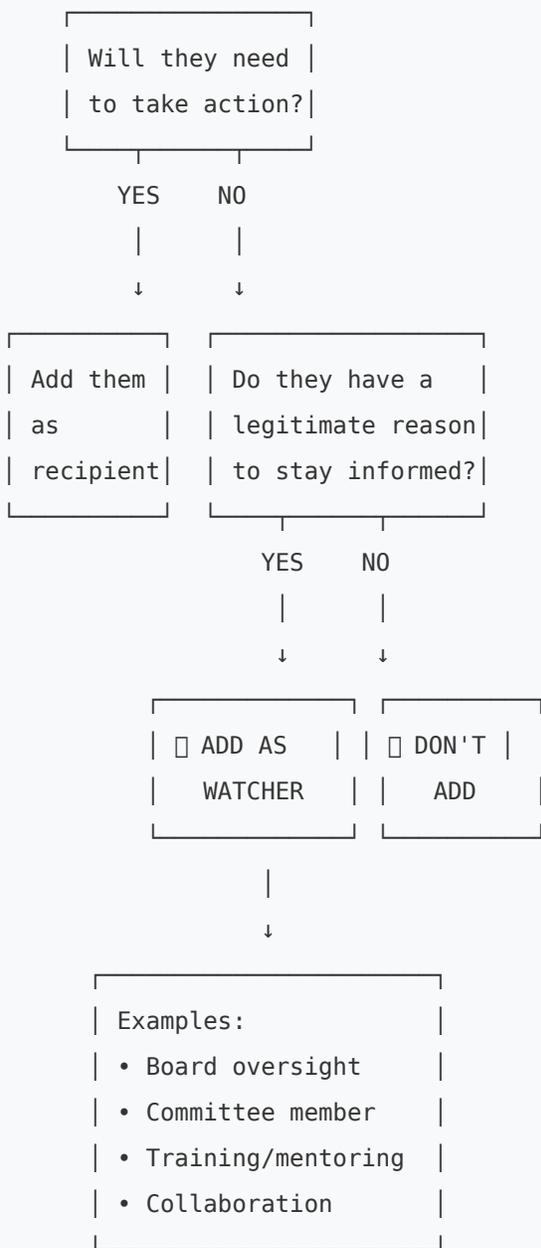
API Interaction Flow

```
                    API CALLS

 ┌─────────────────────────────────────────────┐
 │                                             │
 │  POST /api/workflow/tickets/{id}/add_watcher │
 │  Body: watcher_email, watcher_name, added_by │
 │                                             │
 └─────────────────────────────────────────────┘
                │
                │
                ↓
         ┌──────────────────┐
         │                  │
         │ WorkflowManager  │
         │ addWatcher()     │
         │                  │
         └──────────────────┘
                │
                │
                ├─→ Validate email format
                ├─→ Check for duplicates
                ├─→ Check 50-watcher limit
                ├─→ Generate unsubscribe token
                ├─→ Add to ticket.watchers[]
                ├─→ Save to active_tickets.json
                └─→ Log to ticket_history.jsonl
                │
                │
                ↓
         ┌──────────────────┐
         │                  │
         │  Return success  │
         │  + updated ticket│
         │                  │
         └──────────────────┘
```
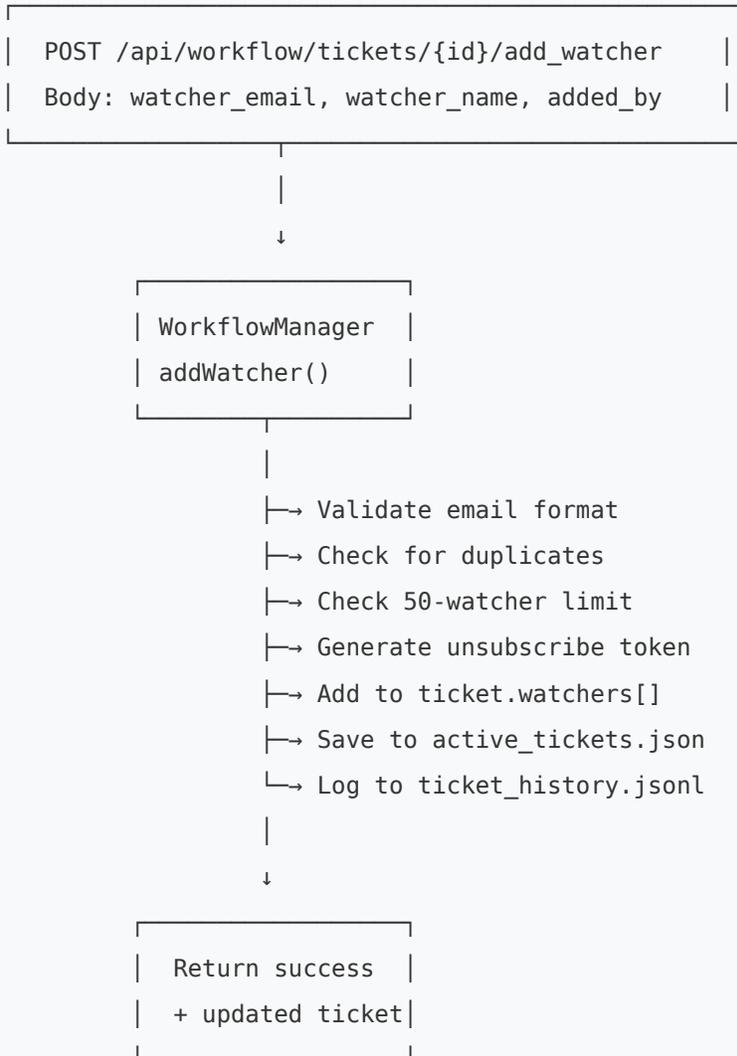
Decision Tree: Should I Add This Person as a Watcher?

```
              Should I add them as a watcher?
                          |
                          ↓
```

```
            ┌─────────────┐
            │ Will they need │
            │ to take action?│
            └──────┬──────┘
                ┌───┴───┐
               YES     NO
                │       │
                ↓       ↓
         ┌──────────┐  ┌────────────────┐
         │ Add them │  │ Do they have a   │
         │ as       │  │ legitimate reason│
         │ recipient│  │ to stay informed?│
         └──────────┘  └───────┬────────┘
                          ┌─────┴─────┐
                         YES         NO
                          │           │
                          ↓           ↓
                   ┌────────────┐  ┌──────────┐
                   │ □ ADD AS   │  │ □ DON'T │
                   │   WATCHER  │  │   ADD    │
                   └────────────┘  └──────────┘
                          │
                          ↓
                 ┌──────────────────────┐
                 │ Examples:             │
                 │ • Board oversight     │
                 │ • Committee member    │
                 │ • Training/mentoring  │
                 │ • Collaboration       │
                 └──────────────────────┘
```

Watcher Lifecycle

```
STAGE 1: ADDITION
━━━━━━━━━━━━━

Person added → Email validated → Unsubscribe token generated
                              ↓
                     Added to watchers array
                              ↓
                     Event logged to history
                              ↓
                       Receives all future
                          notifications
```

```
STAGE 2: ACTIVE WATCHING
━━━━━━━━━━━━━━━━━━

Ticket updated → Email notification → Watcher receives email
                                     ↓
                        Reads update, stays informed


STAGE 3: REMOVAL
━━━━━━━━━━━━━

Self-removal OR someone removes them
              ↓
      Removed from watchers array
              ↓
        Event logged to history
              ↓
      No more notifications received
```

Comparison: Before and After Watchers

BEFORE Watchers Feature

```
Member submits request
          ↓
Recipient gets email
          ↓
President wants to know status
          ↓
Asks recipient via separate email
          ↓
Recipient forwards
          ↓
President not in loop for future updates
          ↓
President must keep asking for updates
```

Problems:

- Information silos

- Duplicate emails

- Manual forwarding

- People left out of loop

```
Member submits request

        ↓

Recipient gets email

        ↓

President clicks "Watch This Ticket"

        ↓

System automatically CC's President on ALL updates

        ↓

President stays informed automatically

        ↓

No need to ask for updates
```
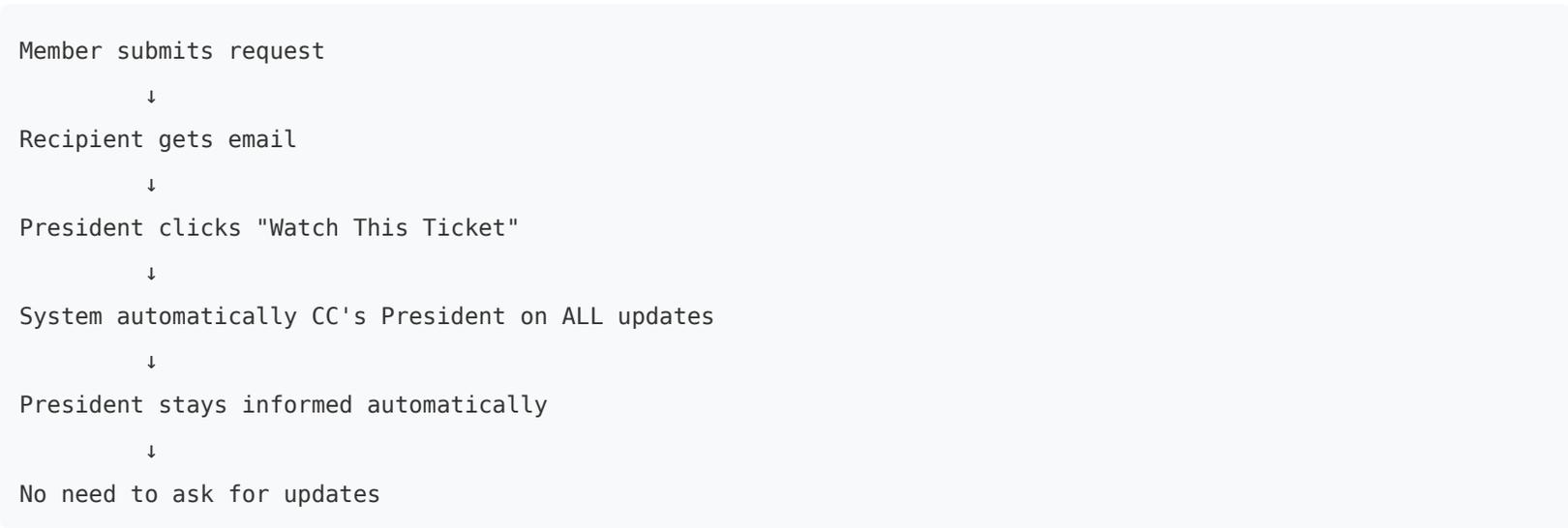
Benefits:

- Automatic updates

- One source of truth

- No forwarding needed

- Complete transparency

Quick Scenarios

Scenario Matrix

Who	Wants To	Solution
President	Monitor financial requests	Watch all financial access tickets
Committee Chair	Collaborate on response	Add committee members as watchers
Board Member	Oversight of volunteers	Watch volunteer interest tickets
Treasurer	Track follow-ups	Watch financial tickets (auto CC'd anyway)
New Board Member	Learn the ropes	Watch tickets in their area to observe
Coordinator	Manage onboarding	Watch new member tickets

Testing Quick Reference

Browser Test URLs

```
Main workflow page:
http://localhost:2025/workflow/my_requests.php

Test ticket (from automated test):
http://localhost:2025/workflow/my_requests.php
(Find: "Watcher Test - 06:58:29")

Admin dashboard:
http://localhost:2025/workflow/admin/workflow_admin.php

Contact form:
http://localhost:2025/contact.php
```

API Test Commands

```
# Quick watcher test
./test_watchers.sh

# Add watcher
curl -X POST "http://localhost:2025/api/workflow/tickets/TICKET_ID/add_watcher" \
    -d "watcher_email=person@example.com" -d "watcher_name=Name"

# Remove watcher
curl -X POST "http://localhost:2025/api/workflow/tickets/TICKET_ID/remove_watcher" \
    -d "watcher_email=person@example.com"

# List watchers
curl "http://localhost:2025/api/workflow/tickets/TICKET_ID/get_watchers" | jq
```

Check Email Logs

```
# View all emails today
cat logs/localhost_emails/$(date +%Y-%m-%d).jsonl | jq

# Count emails
wc -l logs/localhost_emails/$(date +%Y-%m-%d).jsonl
```

```
# Find emails with watchers
cat logs/localhost_emails/$(date +%Y-%m-%d).jsonl | jq 'select(.cc | length > 3)'
```

Ready to test? Start here: `http://localhost:2025/workflow/my_requests.php` ⧉